PF-0565 USN

<110> INCYTE CORPORATION; HILLMAN, Jennifer L.;
 LAL, Preeti G.; TANG, Y. Tom;
 CORLEY, Neil C.; GUEGLER, Karl J.;
 BAUGHN, Mariah R.; PATTERSON, Chandra S.;
 BANDMAN, Olga; AU-YOUNG, Janice K.;
 GORGONE, Gina A.; YUE, Henry;
 AZIMZAI, Yalda; REDDY, Roopa M.;
 LU, Dyung Aina M.; SHIH, Leo L.

- <120> PHOSPHORYLATION EFFECTORS
- <130> PF-0565 USN
- <140> US 09/744,794
- <141> 2001-10-05
- <150> PCT/US99/17132
- <151> 1999-07-28
- <150> US 60/155,213
- <151> 1998-07-28
- <150> US 60/155,196
- <151> 1998-09-14
- <150> US 60/155,239
- <151> 1998-10-14
- <150> US 60/106,889
- <151> 1998-11-03
- <150> US 60/109,093
- <151> 1998-11-19
- <150> US 60/113,796
- <151> 1998-12-22
- <150> US 60/155,233
- <151> 1999-01-12
- <160> 60
- <170> PERL Program
- <210> 1
- <211> 300
- <212> PRT
- <213> Homo sapiens
- <220>
- <221> misc_feature
- <223> Incyte ID No: 132240CD1
- <400> 1
- Met Glu Ser Pro Leu Glu Ser Gln Pro Leu Asp Ser Asp Arg Ser 1 5 10 15 15 Lys Glu Ser Ser Phe Glu Glu Ser Asn Ile Glu Asp Pro Leu
- 20 25 30
 The Wal The Pro Asp Cyc Gle Glu Lyc The Sor Pro Lyc Gly Wal
- Ile Val Thr Pro Asp Cys Gln Glu Lys Thr Ser Pro Lys Gly Val 35 40 45

```
Pro Leu Glu Val Leu Lys Thr Leu Ala Ser Lys Arg Asn Ala Val
                 65
                                      70
Ala Phe Arg Ser Phe Asn Ser His Ile Asn Ala Ser Asn Asn Ser
                 80
                                      85
Glu Pro Ser Arg Met Asn Met Thr Ser Leu Asp Ala Met Asp Ile
                 95
                                     100
Ser Cys Ala Tyr Ser Gly Ser Tyr Pro Met Ala Ile Thr Pro Thr
                110
                                     115
Gln Lys Arg Arg Ser Cys Met Pro His Gln Thr Pro Asn Gln Ile
                                     130
                                                         135
                125
Lys Ser Gly Thr Pro Tyr Arg Thr Pro Lys Ser Val Arg Arg Gly
                140
                                     145
                                                         150
Val Ala Pro Val Asp Asp Gly Arg Ile Leu Gly Thr Pro Asp Tyr
                155
                                     160
                                                         165
Leu Ala Pro Glu Leu Leu Gly Arg Ala His Gly Pro Ala Val
                170
                                                         180
                                     175
Asp Trp Trp Ala Leu Gly Val Cys Leu Phe Glu Phe Leu Thr Gly
                                     190
Ile Pro Pro Phe Asn Asp Glu Thr Pro Gln Gln Val Phe Gln Asn
                200
                                     205
Ile Leu Lys Arg Asp Ile Pro Trp Pro Glu Gly Glu Glu Lys Leu
                215
                                     220
Ser Asp Asn Ala Gln Ser Ala Val Glu Ile Leu Leu Thr Ile Asp
                230
                                     235
Asp Thr Lys Arg Ala Gly Met Lys Glu Leu Lys Arg His Pro Leu
                245
                                     250
                                                         255
Phe Ser Asp Val Asp Trp Glu Asn Leu Gln His Gln Thr Met Pro
                260
                                     265
Phe Ile Pro Gln Pro Asp Asp Glu Thr Asp Thr Ser Tyr Phe Glu
                275
                                     280
                                                         285
Ala Arg Asn Thr Ala Gln His Leu Thr Val Ser Gly Phe Ser Leu
                290
                                     295
                                                         300
<210> 2
<211> 147
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2180116CD1
<400> 2
Met Ala Ala Gln Arg Leu Gly Lys Arg Val Leu Ser Lys Leu Gln
                                      10
Ser Pro Ser Arg Ala Arg Gly Pro Gly Gly Ser Pro Gly Gly Met
                 20
Gln Lys Arg His Ala Arg Val Thr Val Lys Tyr Asp Arg Arg Glu
                 35
                                      40
Leu Gln Arg Arg Leu Asp Val Glu Lys Trp Ile Asp Gly Arg Leu
                 50
                                      55
Glu Glu Leu Tyr Arg Gly Met Glu Ala Asp Met Pro Asp Glu Ile
                 65
                                      70
Asn Ile Asp Glu Leu Leu Glu Leu Glu Ser Glu Glu Glu Arg Ser
                                      85
```

Glu Asn Pro Ala Val Gln Glu Ser Asn Gln Lys Met Leu Gly Pro

55

Arg Lys Ile Gln Gly Leu Leu Lys Ser Cys Gly Lys Pro Val Glu

```
100
Asp Phe Ile Gln Glu Leu Leu Ala Lys Leu Gln Gly Leu His Arg
                                     115
                110
Gln Pro Gly Leu Arg Gln Pro Ser Pro Ser His Asp Gly Ser Leu
                                     130
                125
                                                          135
Ser Pro Leu Gln Asp Arg Ala Arg Thr Ala His Pro
<210> 3
<211> 431
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2197671CD1
<400> 3
Met Ala His Ser Pro Val Gln Ser Gly Leu Pro Gly Met Gln Asn
Leu Lys Ala Asp Pro Glu Glu Leu Phe Thr Lys Leu Glu Lys Ile
                                      25
Gly Lys Gly Ser Phe Gly Glu Val Phe Lys Gly Ile Asp Asn Arg
                                      40
Thr Gln Lys Val Val Ala Ile Lys Ile Ile Asp Leu Glu Glu Ala
                 50
                                      55
Glu Asp Glu Ile Glu Asp Ile Gln Gln Glu Ile Thr Val Leu Ser
                 65
                                      70
Gln Cys Asp Ser Pro Tyr Val Thr Lys Tyr Tyr Gly Ser Tyr Leu
                 80
                                      85
Lys Asp Thr Lys Leu Trp Ile Ile Met Glu Tyr Leu Gly Gly Gly
                 95
                                     100
                                                          105
Ser Ala Leu Asp Leu Leu Glu Pro Gly Arg Leu Asp Glu Thr Gln
                110
                                     115
                                                          120
Ile Ala Thr Ile Leu Arg Glu Ile Leu Lys Gly Leu Asp Tyr Leu
                125
                                     130
His Ser Glu Lys Lys Ile His Arg Asp Ile Lys Ala Ala Asn Val
                140
                                     145
                                                          150
Leu Leu Ser Glu His Gly Glu Val Lys Leu Ala Asp Phe Gly Val
                                     160
Ala Gly Gln Leu Thr Asp Thr Gln Ile Lys Arg Asn Thr Phe Val
                170
                                     175
Gly Thr Pro Phe Trp Met Ala Pro Glu Val Ile Lys Gln Ser Ala
                                     190
                185
Tyr Asp Ser Lys Ala Asp Ile Trp Ser Leu Gly Ile Thr Ala Ile
                                     205
                200
Glu Leu Ala Arg Gly Glu Pro Pro His Ser Glu Leu His Pro Met
                215
                                     220
                                                          225
Lys Val Leu Phe Leu Ile Pro Lys Asn Asn Pro Pro Thr Leu Glu
                230
                                     235
Gly Asn Tyr Ser Lys Pro Leu Lys Glu Phe Val Glu Ala Cys Leu
                                     250
                                                          255
                245
Asn Lys Glu Pro Ser Phe Arg Pro Thr Ala Lys Glu Leu Leu Lys
                260
                                     265
                                                          270
His Lys Phe Ile Leu Arg Asn Ala Lys Lys Thr Ser Tyr Leu Thr
                275
                                     280
                                                          285
Glu Leu Ile Asp Arg Tyr Lys Arg Trp Lys Ala Glu Gln Ser His
                                     295
                                                          300
                290
Asp Asp Ser Ser Ser Glu Asp Ser Asp Ala Glu Thr Asp Gly Gln
```

```
310
Ala Ser Gly Gly Ser Asp Ser Gly Asp Trp Ile Phe Thr Ile Arg
                 320
                                      325
Glu Lys Asp Pro Lys Asn Leu Glu Asn Gly Ala Leu Gln Pro Ser
                 335
                                      340
Asp Leu Asp Arg Asn Lys Met Lys Asp Ile Pro Lys Arg Pro Phe
                 350
                                      355
Ser Gln Cys Leu Ser Thr Ile Ile Ser Pro Leu Phe Ala Glu Leu
                 365
                                      370
Lys Glu Lys Ser Gln Ala Cys Gly Gly Asn Leu Gly Ser Ile Glu
                 380
                                      385
                                                          390
Glu Leu Arg Gly Ala Ile Tyr Leu Ala Glu Glu Ala Cys Pro Gly
                 395
                                      400
 Ile Ser Asp Thr Met Val Ala Gln Leu Val Gln Arg Leu Gln Arg
                 410
                                      415
Tyr Ser Leu Ser Gly Gly Gly Thr Ser Ser His
                 425
 <210> 4
 <211> 218
 <212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2594943CD1
<400> 4
Met Asn Cys Arg Ser Glu Val Leu Glu Val Ser Val Glu Gly Arg
                                       10
Gln Val Glu Glu Ala Met Leu Ala Val Leu His Thr Val Leu Leu
                  20
                                       25
                                                           30
His Arg Ser Thr Gly Lys Phe His Tyr Lys Lys Glu Gly Thr Tyr
                  35
                                       40
Ser Ile Gly Thr Val Gly Thr Gln Asp Val Asp Cys Asp Phe Ile
                  50
                                       55
Asp Phe Thr Tyr Val Arg Val Ser Ser Glu Glu Leu Asp Arg Ala
                                       70
Leu Arg Lys Val Val Gly Glu Phe Lys Asp Ala Leu Arg Asn Ser
                  80
                                       85
Gly Gly Asp Gly Leu Gly Gln Met Ser Leu Glu Phe Tyr Gln Lys
                  95
                                      100
Lys Lys Ser Arg Trp Pro Phe Ser Asp Glu Cys Ile Pro Trp Glu
                 110
                                      115
Val Trp Thr Val Lys Val His Val Val Ala Leu Ala Thr Glu Gln
                                      130
                 125
Glu Arg Gln Ile Cys Arg Glu Lys Val Gly Glu Lys Leu Cys Glu
                                      145
                 140
                                                          150
Lys Ile Ile Asn Ile Val Glu Val Met Asn Arg His Glu Tyr Leu
                 155
                                      160
Pro Lys Met Pro Thr Gln Ser Glu Val Asp Asn Val Phe Asp Thr
                                      175
                 170
Gly Leu Arg Asp Val Gln Pro Tyr Leu Tyr Lys Ile Ser Phe Gln
                 185
                                      190
 Ile Thr Asp Ala Leu Gly Thr Ser Val Thr Thr Thr Met Arg Arg
                                     205
                 200
                                                          210
Leu Ile Lys Asp Thr Leu Ala Leu
                 215
```

```
<211> 474
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 1513871CD1
<400> 5
Met Ile Met Asn Lys Met Lys Asn Phe Lys Arg Arg Phe Ser Leu
                                      10
Ser Val Pro Arg Thr Glu Thr Ile Glu Glu Ser Leu Ala Glu Phe
                 20
Thr Glu Gln Phe Asn Gln Leu His Asn Arg Arg Asn Glu Asn Leu
                 35
                                      40
Gln Leu Gly Pro Leu Gly Arg Asp Pro Pro Gln Glu Cys Ser Thr
Phe Ser Pro Thr Asp Ser Gly Glu Glu Pro Gly Gln Leu Ser Pro
                 65
                                      70
                                                          75
Gly Val Gln Phe Gln Arg Arg Gln Asn Gln Arg Arg Phe Ser Met
                 80
                                      85
Glu Asp Val Ser Lys Arg Leu Ser Leu Pro Met Asp Ile Arg Leu
                 95
                                     100
Pro Gln Glu Phe Leu Gln Lys Leu Gln Met Glu Ser Pro Asp Leu
                110
                                     115
Pro Lys Pro Leu Ser Arg Met Ser Arg Arg Ala Ser Leu Ser Asp
                125
                                     130
Ile Gly Phe Gly Lys Leu Glu Thr Tyr Val Lys Leu Asp Lys Leu
                140
                                     145
Gly Glu Gly Thr Tyr Ala Thr Val Phe Lys Gly Arg Ser Lys Leu
                155
                                     160
Thr Glu Asn Leu Val Ala Leu Lys Glu Ile Arg Leu Glu His Glu
                170
                                     175
Glu Gly Ala Pro Cys Thr Ala Ile Arg Glu Val Ser Leu Leu Lys
                185
                                     190
                                                         195
Asn Leu Lys His Ala Asn Ile Val Thr Leu His Asp Leu Ile His
                                     205
                200
                                                         210
Thr Asp Arg Ser Leu Thr Leu Val Phe Glu Tyr Leu Asp Ser Asp
                215
                                     220
Leu Lys Gln Tyr Leu Asp His Cys Gly Asn Leu Met Ser Met His
                230
                                     235
                                                         240
Asn Val Lys Ile Phe Met Phe Gln Leu Arg Gly Leu Ala Tyr
                245
                                     250
Cys His His Arg Lys Ile Leu His Arg Asp Leu Lys Pro Gln Asn
                260
                                     265
Leu Leu Ile Asn Glu Arg Gly Glu Leu Lys Leu Ala Asp Phe Gly
                275
                                     280
Leu Ala Arg Ala Lys Ser Val Pro Thr Lys Thr Tyr Ser Asn Glu
                290
                                     295
Val Val Thr Leu Trp Tyr Arg Pro Pro Asp Val Leu Leu Gly Ser
                305
                                     310
Thr Glu Tyr Ser Thr Pro Ile Asp Met Trp Gly Val Gly Cys Ile
                320
                                     325
His Tyr Glu Met Ala Thr Gly Arg Pro Leu Phe Pro Gly Ser Thr
                335
                                     340
Val Lys Glu Glu Leu His Leu Ile Phe Arg Leu Leu Gly Thr Pro
                350
                                     355
Thr Glu Glu Thr Trp Pro Gly Val Thr Ala Phe Ser Glu Phe Arg
```

```
365
                                     370
Thr Tyr Ser Phe Pro Cys Tyr Leu Pro Gln Pro Leu Ile Asn His
                380
                                     385
Ala Pro Arg Leu Asp Thr Asp Gly Ile His Leu Leu Ser Ser Leu
                395
                                     400
Leu Leu Tyr Glu Ser Lys Ser Arg Met Ser Ala Glu Ala Ala Leu
                                     415
                410
                                                         420
Ser His Ser Tyr Phe Arg Ser Leu Gly Glu Arg Val His Gln Leu
                425
                                     430
Glu Asp Thr Ala Ser Ile Phe Ser Leu Lys Glu Ile Gln Leu Gln
                440
                                     445
                                                         450
Lys Asp Pro Gly Tyr Arg Gly Leu Ala Phe Gln Gln Pro Gly Arg
                455
                                     460
Gly Lys Asn Arg Arg Gln Ser Ile Phe
                470
<210> 6
<211> 540
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 156108CD1
<400> 6
Met Asn Gly Glu Ala Ile Cys Ser Ala Leu Pro Thr Ile Pro Tyr
                                      10
                                                          15
His Lys Leu Ala Asp Leu Arg Tyr Leu Ser Arg Gly Ala Ser Gly
                 20
                                      25
Thr Val Ser Ser Ala Arg His Ala Asp Trp Arg Val Gln Val Ala
                 35
                                      40
                                                          45
Val Lys His Leu His Ile His Thr Pro Leu Leu Asp Ser Glu Arg
                 50
                                      55
Lys Asp Val Leu Arg Glu Ala Glu Ile Leu His Lys Ala Arg Phe
                                      70
Ser Tyr Ile Leu Pro Ile Leu Gly Ile Cys Asn Glu Pro Glu Phe
                 80
                                      85
                                                          90
Leu Gly Ile Val Thr Glu Tyr Met Pro Asn Gly Ser Leu Asn Glu
                                     100
Leu Leu His Arg Lys Thr Glu Tyr Pro Asp Val Ala Trp Pro Leu
                110
                                     115
Arg Phe Arg Ile Leu His Glu Ile Ala Leu Gly Val Asn Tyr Leu
                125
                                     130
His Asn Met Thr Pro Pro Leu Leu His His Asp Leu Lys Thr Gln
                140
                                     145
Asn Ile Leu Leu Asp Asn Glu Phe His Val Lys Ile Ala Asp Phe
                155
                                     160
Gly Leu Ser Lys Trp Arg Met Met Ser Leu Ser Gln Ser Arg Ser
                170
                                     175
Ser Lys Ser Ala Pro Glu Gly Gly Thr Ile Ile Tyr Met Pro Pro
                185
                                     190
                                                         195
Glu Asn Tyr Glu Pro Gly Gln Lys Ser Arg Ala Ser Ile Lys His
                200
                                     205
Asp Ile Tyr Ser Tyr Ala Val Ile Thr Trp Glu Val Leu Ser Arg
                215
                                     220
Lys Gln Pro Phe Glu Asp Val Thr Asn Pro Leu Gln Ile Met Tyr
                                     235
                230
Ser Val Ser Gln Gly His Arg Pro Val Ile Asn Glu Glu Ser Leu
```

245

```
260
                                    265
Ser Gly Trp Ala Gln Asn Pro Asp Glu Arg Pro Ser Phe Leu Lys
                275
                                    280
Cys Leu Ile Glu Leu Glu Pro Val Leu Arg Thr Phe Glu Glu Ile
                290
                                    295
Thr Phe Leu Glu Ala Val Ile Gln Leu Lys Lys Thr Lys Leu Gln
                305
                                    310
Ser Val Ser Ser Ala Ile His Leu Cys Asp Lys Lys Met Glu
                                    325
                                                         330
                320
Leu Ser Leu Asn Ile Pro Val Asn His Gly Pro Gln Glu Glu Ser
                335
                                    340
Cys Gly Ser Ser Gln Leu His Glu Asn Ser Gly Ser Pro Glu Thr
                350
                                    355
Ser Arg Ser Leu Pro Ala Pro Gln Asp Asn Asp Phe Leu Ser Arg
                365
                                    370
                                                         375
Lys Ala Gln Asp Cys Tyr Phe Met Lys Leu His His Cys Pro Gly
                                    385
Asn His Ser Trp Asp Ser Thr Ile Ser Gly Ser Gln Arg Ala Ala
                                    400
                395
Phe Cys Asp His Lys Thr Thr Pro Cys Ser Ser Ala Ile Ile Asn
                410
                                    415
Pro Leu Ser Thr Ala Gly Asn Ser Glu Arg Leu Gln Pro Gly Ile
                425
                                    430
Ala Gln Gln Trp Ile Gln Ser Lys Arg Glu Asp Ile Val Asn Gln
                                    445
                440
Met Thr Glu Ala Cys Leu Asn Gln Ser Leu Asp Ala Leu Leu Ser
                455
                                    460
Arg Asp Leu Ile Met Lys Glu Asp Tyr Glu Leu Val Ser Thr Lys
                470
                                    475
                                                         480
Pro Thr Arg Thr Ser Lys Val Arg Gln Leu Leu Asp Thr Thr Asp
                485
                                    490
                                                         495
Ile Gln Gly Glu Glu Phe Ala Lys Val Ile Val Gln Lys Leu Lys
                500
                                    505
Asp Asn Lys Gln Met Gly Leu Gln Pro Tyr Pro Glu Ile Leu Val
                515
                                    520
                                                         525
Val Ser Arg Ser Pro Ser Leu Asn Leu Gln Asn Lys Ser Met
<210> 7
<211> 454
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2883243CD1
<400> 7
Met Tyr Asn Thr Val Trp Asn Met Glu Asp Leu Asp Leu Glu Tyr
                                     10
Ala Lys Thr Asp Ile Asn Cys Gly Thr Asp Leu Met Phe Tyr Ile
Glu Met Asp Pro Pro Ala Leu Pro Pro Lys Pro Pro Lys Pro Thr
                 35
                                     40
                                                          45
Thr Val Ala Asn Asn Gly Met Asn Asn Met Ser Leu Gln Asp
```

250

Pro Tyr Asp Ile Pro His Arg Ala Arg Met Ile Ser Leu Ile Glu

```
Ala Glu Trp Tyr Trp Gly Asp Ile Ser Arg Glu Glu Val Asn Glu
                                      70
Lys Leu Arg Asp Thr Ala Asp Gly Thr Phe Leu Val Arg Asp Ala
                 80
                                      85
Ser Thr Lys Met His Gly Asp Tyr Thr Leu Thr Leu Arg Lys Gly
                                     100
                 95
                                                         105
Gly Asn Asn Lys Leu Ile Lys Ile Phe His Arg Asp Gly Lys Tyr
                110
                                     115
Gly Phe Ser Asp Pro Leu Thr Phe Ser Ser Val Val Glu Leu Ile
                125
                                     130
Asn His Tyr Arg Asn Glu Ser Leu Ala Gln Tyr Asn Pro Lys Leu
                140
                                     145
Asp Val Lys Leu Leu Tyr Pro Val Ser Lys Tyr Gln Gln Asp Gln
                155
                                     160
Val Val Lys Glu Asp Asn Ile Glu Ala Val Gly Lys Lys Leu His
                170
                                     175
Glu Tyr Asn Thr Gln Phe Gln Glu Lys Ser Arg Glu Tyr Asp Arg
                185
                                     190
Leu Tyr Glu Glu Tyr Thr Arg Thr Ser Gln Glu Ile Gln Met Lys
                200
                                     205
Arg Thr Ala Ile Glu Ala Phe Asn Glu Thr Ile Lys Ile Phe Glu
                215
                                     220
Glu Gln Cys Gln Thr Gln Glu Arg Tyr Ser Lys Glu Tyr Ile Glu
                230
                                     235
Lys Phe Lys Arg Glu Gly Asn Glu Lys Glu Ile Gln Arg Ile Met
                245
                                     250
His Asn Tyr Asp Lys Leu Lys Ser Arg Ile Ser Glu Ile Ile Asp
                260
                                     265
                                                         270
Ser Arg Arg Arg Leu Glu Glu Asp Leu Lys Lys Gln Ala Ala Glu
                275
                                     280
Tyr Arg Glu Ile Asp Lys Arg Met Asn Ser Ile Lys Pro Asp Leu
                290
                                     295
                                                         300
Ile Gln Leu Arg Lys Thr Arg Asp Gln Tyr Leu Met Trp Leu Thr
                305
                                     310
Gln Lys Gly Val Arg Gln Lys Lys Leu Asn Glu Trp Leu Gly Asn
                320
                                     325
Glu Asn Thr Glu Asp Gln Tyr Ser Leu Val Glu Asp Asp Glu Asp
                335
                                     340
                                                         345
Leu Pro His His Asp Glu Lys Thr Trp Asn Val Gly Ser Ser Asn
                350
                                     355
Arg Asn Lys Ala Glu Asn Leu Leu Arg Gly Lys Arg Asp Gly Thr
                                     370
                365
Phe Leu Val Arg Glu Ser Ser Lys Gln Gly Cys Tyr Ala Cys Ser
                380
                                     385
Val Val Asp Gly Glu Val Lys His Cys Val Ile Asn Lys Thr
                395
                                     400
Ala Thr Gly Tyr Gly Phe Ala Glu Pro Tyr Asn Leu Tyr Ser Ser
                410
                                     415
                                                         420
Leu Lys Glu Leu Val Leu His Tyr Gln His Thr Ser Leu Val Gln
                425
                                     430
His Asn Asp Ser Leu Asn Val Thr Leu Ala Tyr Pro Val Tyr Ala
                                     445
                440
                                                         450
Gln Gln Arg Arg
```

<210> 8

<211> 502

<212> PRT

<213> Homo sapiens

<220> <221> misc feature <223> Incyte ID No: 3173355CD1 <400> 8 Met Phe Gly Thr Leu Leu Tyr Cys Phe Phe Leu Ala Thr Val Pro Ala Leu Ala Glu Thr Gly Gly Glu Arg Gln Leu Ser Pro Glu Lys Ser Glu Ile Trp Gly Pro Gly Leu Lys Ala Asp Val Val Leu Pro Ala Arg Tyr Phe Tyr Ile Gln Ala Val Asp Thr Ser Gly Asn Lys Phe Thr Ser Ser Pro Gly Glu Lys Val Phe Gln Val Lys Val Ser Ala Pro Glu Glu Gln Phe Thr Arg Val Gly Val Gln Val Leu Asp Arg Lys Asp Gly Ser Phe Ile Val Arg Tyr Arg Met Tyr Ala Ser Tyr Lys Asn Leu Lys Val Glu Ile Lys Phe Gln Gly Gln His Val Ala Lys Ser Pro Tyr Ile Leu Lys Gly Pro Val Tyr His Glu Asn Cys Asp Cys Pro Leu Gln Asp Ser Ala Ala Trp Leu Arg Glu Met Asn Cys Pro Glu Thr Ile Ala Gln Ile Gln Arg Asp Leu Ala His Phe Pro Ala Val Asp Pro Glu Lys Ile Ala Val Glu Ile Pro Lys Arg Phe Gly Gln Arg Gln Ser Leu Cys His Tyr Thr Leu Lys Asp Asn Lys Val Tyr Ile Lys Thr His Gly Glu His Val Gly Phe Arg Ile Phe Met Asp Ala Ile Leu Leu Ser Leu Thr Arg Lys Val Lys Met Pro Asp Val Glu Leu Phe Val Asn Leu Gly Asp Trp Pro -235Leu Glu Lys Lys Ser Asn Ser Asn Ile His Pro Ile Phe Ser Trp Cys Gly Ser Thr Asp Ser Lys Asp Ile Val Met Pro Thr Tyr Asp Leu Thr Asp Ser Val Leu Glu Thr Met Gly Arg Val Ser Leu Asp Met Met Ser Val Gln Ala Asn Thr Gly Pro Pro Trp Glu Ser Lys Asn Ser Thr Ala Val Trp Arg Gly Arg Asp Ser Arg Lys Glu Arg Leu Glu Leu Val Lys Leu Ser Arg Lys His Pro Glu Leu Ile Asp Ala Ala Phe Thr Asn Phe Phe Phe Lys His Asp Glu Asn Leu Tyr Gly Pro Ile Val Lys His Ile Ser Phe Phe Asp Phe Phe Lys His Lys Tyr Gln Ile Asn Ile Asp Gly Thr Val Ala Ala Tyr Arg Leu Pro Tyr Leu Leu Val Gly Asp Ser Val Val Leu Lys Gln Asp Ser Ile Tyr Tyr Glu His Phe Tyr Asn Glu Leu Gln Pro Trp

```
Lys His Tyr Ile Pro Val Lys Ser Asn Leu Ser Asp Leu Leu Glu
                410
                                     415
Lys Leu Lys Trp Ala Lys Asp His Asp Glu Glu Ala Lys Lys Ile
                425
                                     430
Ala Lys Ala Gly Gln Glu Phe Ala Arg Asn Asn Leu Met Gly Asp
                                     445
                440
                                                          450
Asp Ile Phe Cys Tyr Tyr Phe Lys Leu Phe Gln Glu Tyr Ala Asn
                455
                                     460
Leu Gln Val Ser Glu Pro Gln Ile Arg Glu Gly Met Lys Arg Val
                470
                                     475
                                                          480
Glu Pro Gln Thr Glu Asp Asp Leu Phe Pro Cys Thr Cys His Arg
                485
                                     490
                                                          495
Lys Lys Thr Lys Asp Glu Leu
<210> 9
<211> 282
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 5116906CD1
<400> 9
Met Trp Ala Cys Gly Val Ile Leu Tyr Ile Leu Leu Val Gly Tyr
                                      10
Pro Pro Phe Trp Asp Glu Asp Gln His Arg Leu Tyr Gln Gln Ile
                 20
Lys Ala Gly Ala Tyr Asp Phe Pro Ser Pro Glu Trp Asp Thr Val
                 35
                                      40
Thr Pro Glu Ala Lys Asp Leu Ile Asn Lys Met Leu Thr Ile Asn
                                      55
                 50
Pro Ala Lys Arg Ile Thr Ala Ser Glu Ala Leu Lys His Pro Trp
                 65
                                      70
                                                          75
Ile Cys Gln Arg Ser Thr Val Ala Ser Met Met His Arg Gln Glu
                 80
                                      85
                                                           90
Thr Val Asp Cys Leu Lys Lys Phe Asn Ala Arg Arg Lys Leu Lys
                 95
                                     100
                                                          105
Gly Ala Ile Leu Thr Thr Met Leu Ala Thr Arg Asn Phe Ser Ala
                110
                                     115
Ala Lys Ser Leu Leu Lys Lys Pro Asp Gly Val Lys Glu Ser Thr
                125
                                     130
                                                          135
Glu Ser Ser Asn Thr Thr Ile Glu Asp Glu Asp Val Lys Ala Arg
                140
                                     145
Lys Gln Glu Ile Ile Lys Val Thr Glu Gln Leu Ile Glu Ala Ile
                155
                                     160
Asn Asn Gly Asp Phe Glu Ala Tyr Thr Lys Ile Cys Asp Pro Gly
                170
                                     175
                                                          180
Leu Thr Ala Phe Glu Pro Glu Ala Leu Gly Asn Leu Val Glu Gly
                185
                                     190
                                                          195
Met Asp Phe His Arg Phe Tyr Phe Glu Asn Ala Leu Ser Lys Ser
                                     205
                200
                                                          210
Asn Lys Pro Ile His Thr Ile Ile Leu Asn Pro His Val His Leu
                215
                                     220
Val Gly Asp Asp Ala Ala Cys Ile Ala Tyr Ile Arg Leu Thr Gln
                230
                                     235
                                                          240
Tyr Met Asp Gly Ser Gly Met Pro Lys Thr Met Gln Ser Glu Glu
                245
                                     250
                                                          255
```

```
Thr Arg Val Trp His Arg Arg Asp Gly Lys Trp Gln Asn Val His
                260
                                    265
Phe His Arg Ser Gly Ser Pro Thr Val Pro Ile Asn
<210> 10
<211> 510
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 940589CD1
<400> 10
Met Lys Ala Asp Ile Lys Ile Trp Ile Leu Thr Gly Asp Lys Gln
                                      10
Glu Thr Ala Ile Asn Ile Gly His Ser Cys Lys Leu Leu Lys Lys
Asn Met Gly Met Ile Val Ile Asn Glu Gly Ser Leu Asp Ser Phe
                                      40
                                                          45
Ser Asn Thr Gln Asn Ser Arg Lys Glu Ala Val Leu Leu Ala Lys
                                      55
Met Lys His Pro Asn Ile Val Ala Phe Lys Glu Ser Phe Glu Ala
                 65
                                      70
Glu Gly His Leu Tyr Ile Val Met Glu Tyr Cys Asp Gly Gly Asp
                 80
                                      85
Leu Met Gln Lys Ile Lys Gln Gln Lys Gly Lys Leu Phe Pro Glu
                 95
                                     100
Asp Met Ile Leu Asn Trp Phe Thr Gln Met Cys Leu Gly Val Asn
                                                         120
                110
                                     115
His Ile His Lys Lys Arg Val Leu His Arg Asp Ile Lys Ser Lys
                125
                                    130
                                                         135
Asn Ile Phe Leu Thr Gln Asn Gly Lys Val Lys Leu Gly Asp Phe
                140
                                     145
Gly Ser Ala Arg Leu Leu Ser Asn Pro Met Ala Phe Ala Cys Thr
                155
                                     160
Tyr Val Gly Thr Pro Tyr Tyr Val Pro Pro Glu Ile Trp Glu Asn
                                     175
                170
Leu Pro Tyr Asn Asn Lys Ser Asp Ile Trp Ser Leu Gly Cys Ile
                185
                                     190
Leu Tyr Glu Leu Cys Thr Leu Lys His Pro Phe Gln Ala Asn Ser
                200
                                     205
Trp Lys Asn Leu Ile Leu Lys Val Cys Gln Gly Cys Ile Ser Pro
                                     220
                215
Leu Pro Ser His Tyr Ser Tyr Glu Leu Gln Phe Leu Val Lys Gln
                                     235
                230
Met Phe Lys Arg Asn Pro Ser His Arg Pro Ser Ala Thr Thr Leu
                245
                                     250
                                                         255
Leu Ser Arg Gly Ile Val Ala Arg Leu Val Gln Lys Cys Leu Pro
                260
                                     265
                                                         270
Pro Glu Ile Ile Met Glu Tyr Gly Glu Val Leu Glu Ile
                275
                                     280
                                                         285
Lys Asn Ser Lys His Asn Thr Pro Arg Lys Lys Thr Asn Pro Ser
                290
                                     295
Arg Ile Arg Ile Ala Leu Gly Asn Glu Ala Ser Thr Val Gln Glu
                305
                                     310
                                                         315
Glu Glu Gln Asp Arg Lys Gly Ser His Thr Asp Leu Glu Ser Ile
                320
                                     325
                                                         330
```

```
335
                                     340
Glu Lys Gly Asn Lys Ser Val His Leu Arg Lys Ala Ser Ser Pro
                350
                                     355
                                                          360
Asn Leu His Arg Arg Gln Trp Glu Lys Asn Val Pro Asn Thr Ala
                365
                                     370
Leu Thr Ala Leu Glu Asn Ala Ser Ile Leu Thr Ser Ser Leu Thr
                380
                                     385
Ala Glu Asp Asp Arg Gly Gly Ser Val Ile Lys Tyr Ser Lys Asn
                395
                                     400
Thr Thr Arg Lys Gln Trp Leu Lys Glu Thr Pro Asp Thr Leu Leu
                410
                                     415
                                                          420
Asn Ile Leu Lys Asn Ala Asp Leu Ser Leu Ala Phe Gln Thr Tyr
                425
                                     430
                                                          435
Thr Ile Tyr Arg Pro Gly Ser Glu Gly Phe Leu Lys Gly Pro Leu
                440
                                     445
                                                          450
Ser Glu Glu Thr Glu Ala Ser Asp Ser Val Asp Gly Gly His Asp
                455
                                     460
                                                          465
Ser Val Ile Leu Asp Pro Glu Arg Leu Glu Pro Gly Leu Asp Glu
                470
                                     475
Glu Asp Thr Asp Phe Glu Glu Glu Asp Asp Asn Pro Asp Trp Val
                                     490
                485
Ser Glu Leu Lys Lys Arg Ala Gly Trp Gln Gly Leu Cys Asp Arg
                                                          510
<210> 11
<211> 248
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 304421CD1
<400> 11
Met Ala Glu Thr Ser Leu Pro Glu Leu Gly Gly Glu Asp Lys Ala
                                      10
                                                           15
Thr Pro Cys Pro Ser Ile Leu Glu Leu Glu Glu Leu Leu Arg Ala
                 20
Gly Lys Ser Ser Cys Ser Arg Val Asp Glu Val Trp Pro Asn Leu
                 35
                                      40
Phe Ile Gly Asp Ala Met Asp Ser Leu Gln Lys Gln Asp Leu Arg
                 50
                                      55
Arg Pro Lys Ile His Gly Ala Val Gln Ala Ser Pro Tyr Gln Pro
                 65
                                      70
Pro Thr Leu Ala Ser Leu Gln Arg Leu Leu Trp Val Arg Gln Ala
                 80
                                      85
Ala Thr Leu Asn His Ile Asp Glu Val Trp Pro Ser Leu Phe Leu
                                     100
                 95
Gly Asp Ala Tyr Ala Ala Arg Asp Lys Ser Lys Leu Ile Gln Leu
                110
                                     115
                                                          120
Gly Ile Thr His Val Val Asn Ala Ala Ala Gly Lys Phe Gln Val
                                     130
                125
                                                          135
Asp Thr Gly Ala Lys Phe Tyr Arg Gly Met Ser Leu Glu Tyr Tyr
                140
                                     145
                                                          150
Gly Ile Glu Ala Asp Asp Asn Pro Phe Phe Asp Leu Ser Val Tyr
                155
                                     160
                                                          165
Phe Leu Pro Val Ala Arg Tyr Ile Arg Ala Ala Leu Ser Val Pro
```

Asn Glu Asn Leu Val Glu Ser Ala Leu Arg Arg Val Asn Arg Glu

```
175
                170
Gln Gly Arg Val Leu Val His Cys Ala Met Gly Val Ser Arg Ser
                185
                                     190
Ala Thr Leu Val Leu Ala Phe Leu Met Ile Tyr Glu Asn Met Thr
                                     205
                200
                                                          210
Leu Val Glu Ala Ile Gln Thr Val Gln Ala His Arg Asn Ile Cys
                215
                                     220
Pro Asn Ser Gly Phe Leu Arg Gln Leu Gln Val Leu Asp Asn Arg
                230
                                     235
                                                          240
Leu Gly Arg Glu Thr Gly Arg Phe
                245
<210> 12
<211> 810
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 1213802CD1
<400> 12
Met Pro Asn Gln Gly Glu Asp Cys Tyr Phe Phe Phe Tyr Ser Thr
Cys Thr Lys Gly Asp Ser Cys Pro Phe Arg His Cys Glu Ala Ala
                 20
                                      25
Ile Gly Asn Glu Thr Val Cys Thr Leu Trp Gln Glu Gly Arg Cys
                 35
                                      40
Phe Arg Gln Val Cys Arg Phe Arg His Met Glu Ile Asp Lys Lys
                                      55
                                                           60
                 50
Arg Ser Glu Ile Pro Cys Tyr Trp Glu Asn Gln Pro Thr Gly Cys
                 65
                                      70
Gln Lys Leu Asn Cys Ala Phe His His Asn Arg Gly Arg Tyr Val
                 80
                                      85
Asp Gly Leu Phe Leu Pro Pro Ser Lys Thr Val Leu Pro Thr Val
                 95
                                     100
                                                          105
Pro Glu Ser Pro Glu Glu Glu Val Lys Ala Ser Gln Leu Ser Val
                                                          120
                110
                                     115
Gln Gln Asn Lys Leu Ser Val Gln Ser Asn Pro Ser Pro Gln Leu
                125
                                     130
Arg Ser Val Met Lys Val Glu Ser Ser Glu Asn Val Pro Ser Pro
                                     145
                140
Thr His Pro Pro Val Val Ile Asn Ala Ala Asp Asp Asp Glu Asp
                                     160
                155
Asp Asp Asp Gln Phe Ser Glu Glu Gly Asp Glu Thr Lys Thr Pro
                170
                                     175
Thr Leu Gln Pro Thr Pro Glu Val His Asn Gly Leu Arg Val Thr
                185
                                     190
                                                          195
Ser Val Arg Lys Pro Ala Val Asn Ile Lys Gln Gly Glu Cys Leu
                200
                                     205
Asn Phe Gly Ile Lys Thr Leu Glu Glu Ile Lys Ser Lys Lys Met
                215
                                     220
                                                          225
Lys Glu Lys Ser Lys Lys Gln Gly Glu Gly Ser Ser Gly Val Ser
                230
                                     235
Ser Leu Leu His Pro Glu Pro Val Pro Gly Pro Glu Lys Glu
                245
                                     250
                                                          255
Asn Val Arg Thr Val Val Arg Thr Val Thr Leu Ser Thr Lys Gln
                                     265
                                                          270
                260
```

Gly Glu Glu Pro Leu Val Arg Leu Ser Leu Thr Glu Arg Leu Gly

				275					280					285
Lys	Arg	Lys	Phe	Ser 290	Ala	Gly	Gly	Asp	Ser 295	Asp	Pro	Pro	Leu	Lys
Arg	Ser	Leu	Ala	Gln 305	Arg	Leu	Gly	Lys	Lys 310	Val	Glu	Ala	Pro	Glu 315
Thr	Asn	Ile	Asp	Lys 320	Thr	Pro	Lys	Lys	Ala 325	Gln	Val	Ser	Lys	Ser 330
Leu	Lys	Glu	Arg	Leu 335	Gly	Met	Ser	Ala	Asp 340	Pro	Asp	Asn	Glu	Asp 345
Ala	Thr	Asp	Lys	Val 350	Asn	Lys	Val	Gly	Glu 355	Ile	His	Val	Lys	Thr 360
Leu	Glu	Glu	Ile	Leu 365	Leu	Glu	Arg	Ala	Ser 370	Gln	Lys	Arg	Gly	Glu 375
Leu	Gln	Thr	Lys	Leu 380	Lys	Thr	Glu	Gly	Pro 385	Ser	Lys	Thr	Asp	Asp 390
Ser	Thr	Ser	Gly		Arg	Ser	Ser	Ser		Ile	Arg	Ile	Lys	
Phe	Ser	Glu	Val	Leu 410	Ala	Glu	Lys	Lys	His 415	Arg	Gln	Gln	Glu	Ala 420
Glu	Arg	Gln	Lys	Ser 425	Lys	Lys	Asp	Thr	Thr 430	Cys	Ile	Lys	Leu	Lys 435
Ile	Asp	Ser	Glu	Ile 440	Lys	Lys	Thr	Val	Val 445	Leu	Pro	Pro	Ile	Val 450
Ala	Ser	Arg	Gly	Gln 455	Ser	Glu	Glu	Pro	Ala 460	Gly	Lys	Thr	Lys	
Met	Gln	Glu	Val	_	Ile	Lys	Thr	Leu		G1u	Ile	Lys	Leu	
Lys	Ala	Leu	Arg		Gln	Gln	Ser	Ser		Ser	Ser	Thr	Ser	
Pro	Ser	Gln	His		Ala	Thr	Pro	Gly		Arg	Arg	Leu	Leu	
Ile	Thr	Lys	Arg	Thr 515	Gly	Met	Lys	Glu	Glu 520	Lys	Asn	Leu	Gln	
G1y	Asn	Glu	Val	Asp 530	Ser	Gln	Ser	Ser	Ile 535	Arg	Thr	Glu	Ala	Lys 540
Glu	Ala	Ser	Gly	Glu 545	Thr	Thr	Gly	Val'	Asp 550	Ile	Thr	Lys	Ile	Gln 555
Val	Lys	Arg	Cys	Glu 560	Thr	Met	Arg	Glu	Lys 565	His	Met	Gln	Lys	Gln 570
Gln	Glu	Arg	Glu	Lys 575	Ser	Va1	Leu	Thr	Pro 580	Leu	Arg	G1y	Asp	Va1 585
Ala	Ser	Cys	Asn	Thr 590	Gln	Val	Ala	Glu		Pro	Val	Leu	Thr	
Val	Pro	Gly	Ile		Arg	His	Leu	Thr	Lys 610	Arg	Leu	Pro	Thr	
Ser	Ser	Gln	Lys		Glu	Val	Glu	Thr		Gly	Ile	Gly	Asp	
Leu	Leu	Asn	Val		Cys	Ala	Ala	Gln		Leu	Glu	Lys	Arg	
Lys	Ala	Lys	Pro		Val	Asn	Va1	Lys		Ser	Val	Val	Lys	
Val	Ser	Ser	Pro		Leu	Ala	Pro	Lys		Lys	Ala	Val	Glu	
His	Ala	Ala	Val		Ala	Ala	Val	Lys		Leu	Ser	Ser	Ser	
Val	Leu	Gln	Glu		Pro	Ala	Lys	Lys		Ala	Val	Ala	Val	
Pro	Leu	Val	Ser		Asp	Lys	Ser	Val		Va1	Pro	Glu	Ala	

```
Asn Pro Arg Asp Ser Leu Val Leu Pro Pro Thr Gln Ser Ser Ser
                725
                                    730
Asp Ser Ser Pro Pro Glu Val Ser Gly Pro Ser Ser Gln Met
                740
                                    745
                                                         750
Ser Met Lys Thr Arg Arg Leu Ser Ser Ala Ser Thr Gly Lys Pro
                755
                                    760
Pro Leu Ser Val Glu Asp Asp Phe Glu Lys Leu Ile Trp Glu Ile
                770
                                     775
Ser Gly Gly Lys Leu Glu Ala Glu Ile Asp Leu Asp Pro Gly Lys
                785
                                    790
Asp Glu Asp Asp Leu Leu Clu Leu Ser Glu Met Ile Asp Ser
                800
                                    805
<210> 13
<211> 549
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 1378134CD1
<400> 13
Met Arg Arg Arg Ala Ser Asn Ala Ala Ala Ala His Thr Ile
                                     10
Gly Gly Ser Lys His Thr Met Asn Asp His Leu His Val Gly Ser
                 20
                                     25
His Ala His Gly Gln Ile Gln Val Arg Gln Leu Phe Glu Asp Asn
                 35
                                     40
Ser Asn Lys Arg Thr Val Leu Thr Thr Gln Pro Asn Gly Leu Thr
                 50
                                     55
Thr Val Gly Lys Thr Gly Leu Pro Val Val Pro Glu Arg Gln Leu
                 65
                                     70
Asp Ser Ile His Arg Arg Gln Gly Ser Ser Thr Ser Leu Lys Ser
                 80
                                     85
                                                          90
Met Glu Gly Met Gly Lys Val Lys Ala Thr Pro Met Thr Pro Glu
                 95
                                    100
                                                         105
Gln Ala Met Lys Gln Tyr Met Gln Lys Leu Thr Ala Phe Glu His
                110
His Glu Ile Phe Ser Tyr Pro Glu Ile Tyr Phe Leu Gly Leu Asn
                                    130
                125
Ala Lys Lys Arg Gln Gly Met Thr Gly Gly Pro Asn Asn Gly Gly
                                    145
                140
Tyr Asp Asp Gln Gly Ser Tyr Val Gln Val Pro His Asp His
                155
                                    160
Val Ala Tyr Arg Tyr Glu Val Leu Lys Val Ile Gly Lys Gly Ser
                170
                                    175
Phe Gly Gln Val Val Lys Ala Tyr Asp His Lys Val His Gln His
                185
                                    190
Val Ala Leu Lys Met Val Arg Asn Glu Lys Arg Phe His Arg Gln
                200
                                    205
                                                         210
Ala Ala Glu Glu Ile Arg Ile Leu Glu His Leu Arg Lys Gln Asp
                215
                                    220
Lys Asp Asn Thr Met Asn Val Ile His Met Leu Glu Asn Phe Thr
                230
                                    235
                                                         240
Phe Arg Asn His Ile Cys Met Thr Phe Glu Leu Leu Ser Met Asn
```

Leu Tyr Glu Leu Ile Lys Lys Asn Lys Phe Gln Gly Phe Ser Leu

```
260
                                     265
Pro Leu Val Arg Lys Phe Ala His Ser Ile Leu Gln Cys Leu Asp
                275
                                     280
Ala Leu His Lys Asn Arg Ile Ile His Cys Asp Leu Lys Pro Glu
                290
                                     295
                                                          300
Asn Ile Leu Leu Lys Gln Gln Gly Arg Ser Gly Ile Lys Val Ile
                305
                                     310
Asp Phe Gly Ser Ser Cys Tyr Glu His Gln Arg Val Tyr Thr Tyr
                320
                                     325
                                                          330
Ile Gln Ser Arg Phe Tyr Arg Ala Pro Glu Val Ile Leu Gly Ala
                                     340
                335
Arg Tyr Gly Met Pro Ile Asp Met Trp Ser Leu Gly Cys Ile Leu
                350
                                     355
Ala Glu Leu Leu Thr Gly Tyr Pro Leu Leu Pro Gly Glu Asp Glu
                365
                                     370
                                                         375
Gly Asp Gln Leu Ala Cys Met Ile Glu Leu Leu Gly Met Pro Ser
                380
                                     385
                                                          390
Gln Lys Leu Leu Asp Ala Ser Lys Arg Ala Lys Asn Phe Val Ser
                395
                                     400
Ser Lys Gly Tyr Pro Arg Tyr Cys Thr Val Thr Thr Leu Ser Asp
                410
                                     415
                                                          420
Gly Ser Val Val Leu Asn Gly Gly Arg Ser Arg Arg Gly Lys Leu
                425
                                     430
Arg Gly Pro Pro Glu Ser Arg Glu Trp Gly Asn Ala Leu Lys Gly
                440
                                     445
                                                          450
Cys Asp Asp Pro Leu Phe Leu Asp Phe Leu Lys Gln Cys Leu Glu
                455
                                     460
Trp Asp Pro Ala Val Arg Met Thr Pro Gly Gln Ala Leu Arg His
                470
                                     475
Pro Trp Leu Arg Arg Leu Pro Lys Pro Pro Thr Gly Glu Lys
                                     490
                485
                                                          495
Thr Ser Val Lys Arg Ile Thr Glu Ser Thr Gly Ala Ile Thr Ser
                500
                                     505
Ile Ser Lys Leu Pro Pro Pro Ser Ser Ser Ala Ser Lys Leu Arg
                515
                                     520
Thr Asn Leu Ala Gln Met Thr Asp Ala Asn Gly Asn Ile Gln Gln
                530
                                     535
Arg Thr Val Leu Pro Lys Leu Val Ser
                545
<210> 14
<211> 416
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 1490070CD1
<400> 14
Met Met Pro Gln Leu Gln Phe Lys Asp Ala Phe Trp Cys Arg Asp
                                     10
Phe Thr Ala His Thr Gly Tyr Glu Val Leu Leu Gln Arg Leu Leu
                                      25
Asp Gly Arg Lys Met Cys Lys Asp Met Val Glu Leu Leu Trp Gln
                 35
                                      40
Arg Ala Gln Ala Glu Glu Arg Tyr Gly Lys Glu Leu Val Gln Ile
                                      55
Ala Arg Lys Ala Gly Gly Gln Thr Glu Ile Asn Ser Leu Arg Ala
```

```
Ser Phe Asp Ser Leu Lys Gln Gln Met Glu Asn Val Gly Ser Ser
                 80
                                      85
His Ile Gln Leu Ala Leu Thr Leu Arg Glu Glu Leu Arg Ser Leu
                 95
                                     100
Glu Glu Phe Arg Glu Arg Gln Lys Glu Gln Arg Lys Lys Tyr Glu
                110
                                     115
                                                          120
Ala Val Met Asp Arg Val Gln Lys Ser Lys Leu Ser Leu Tyr Lys
                125
                                     130
                                                          135
Lys Ala Met Glu Ser Lys Lys Thr Tyr Glu Gln Lys Cys Arg Asp
                140
                                     145
                                                          150
Ala Asp Asp Ala Glu Gln Ala Phe Glu Arg Ile Ser Ala Asn Gly
                155
                                     160
                                                          165
His Gln Lys Gln Val Glu Lys Ser Gln Asn Lys Ala Arg Gln Cys
                170
                                     175
                                                          180
Lys Asp Ser Ala Thr Glu Ala Glu Arg Val Tyr Arg Gln Ser Ile
                                     190
                                                          195
                185
Ala Gln Leu Glu Lys Val Arg Ala Glu Trp Glu Gln Glu His Arg
                                     205
Thr Thr Cys Glu Ala Phe Gln Leu Gln Glu Phe Asp Arg Leu Thr
                                     220
                215
                                                          225
Ile Leu Arg Asn Ala Leu Trp Val His Ser Asn Gln Leu Ser Met
                                     235
                230
Gln Cys Val Lys Asp Asp Glu Leu Tyr Glu Glu Val Arg Leu Thr
                245
                                     250
                                                          255
Leu Glu Gly Cys Ser Ile Asp Ala Asp Ile Asp Ser Phe Ile Gln
                260
                                     265
                                                          270
Ala Lys Ser Thr Gly Thr Glu Pro Pro Ala Pro Val Pro Tyr Gln
                275
                                     280
Asn Tyr Tyr Asp Arg Glu Val Thr Pro Leu Thr Ser Ser Pro Gly
                290
                                     295
                                                          300
Ile Gln Pro Ser Cys Gly Met Ile Lys Arg Phe Ser Gly Leu Leu
                305
                                     310
His Gly Ser Pro Lys Thr Thr Ser Leu Ala Ala Ser Ala Ala Ser
                320
                                     325
Thr Glu Thr Leu Thr Pro Thr Pro Glu Arg Asn Glu Gly Val Tyr
                335
                                     340
                                                          345
Thr Ala Ile Ala Val Gln Glu Ile Gln Gly Asn Pro Ala Ser Pro
                                     355
Ala Gln Glu Tyr Arg Ala Leu Tyr Asp Tyr Thr Ala Gln Asn Pro
                                     370
                365
Asp Glu Leu Asp Leu Ser Ala Gly Asp Ile Leu Glu Val Ile Leu
                380
                                     385
Glu Gly Glu Asp Gly Trp Trp Thr Val Glu Arg Asn Gly Gln Arg
                395
                                     400
Gly Phe Val Pro Gly Ser Tyr Leu Glu Lys Leu
                410
<210> 15
<211> 425
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 1997814CD1
<400> 15
```

Met Glu Gln Gly Leu Glu Glu Glu Glu Val Asp Pro Arg Ile

1				5					10					15
_	Gly	Glu	Leu		Lys	Leu	Asn	Gln		Thr	Asp	Asp	Ile	
Arg	Arg	Glu	Thr	Glu 35	Leu	Glu	Asp	Ala	Arg 40	Gln	Lys	Phe	Arg	Ser 45
Val	Leu	Val	Glu	Ala 50	Thr	Val	Lys	Leu	Asp 55	Glu	Leu	Val	Lys	Lys 60
Ile	Gly	Lys	Ala	Val 65	Glu	Asp	Ser	Lys	Pro 70	Tyr	Trp	Glu	Ala	Arg 75
Arg	Val	Ala	Arg	Gln 80	Ala	Gln	Leu	Glu	Ala 85	Gln	Lys	Ala	Thr	Gln 90
_				95					100				Glu	105
				110					115	-	_	_	Arg	120
				125					130				Gln	135
				140					145				Val	150
_				155	_	_			160		_	_	Met	165
			-	Lys 170		-	_		175		_		_	Pro 180
				185					190				Gln	195
				200					205				Ala	210
-		_	_	215			_		220				Ser	225
				230	_	_			235		_		Arg	240
γ.	_		_	245					250				Asp	255
	_			260			_		265				Ser	270
			_	275		_			280				Asp	285
				290					295		_		Thr	300
				305	_				310			_	Pro	315
		_		320					325				Gly	330
				335					340				Ala Gly	345
				350					355				Leu	360
				365					370					375
				380					385				Ser	390
			_	395					400				Leu	405
				410	GTĀ	Arg	Аѕр	GTĀ	415	116	Ala	Asp	Ile	Lуs 420
Mec	vaı	GIN	Ile	425										

```
<211> 1135
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2299715CD1
<400> 16
Met Ala Asn Asp Ser Pro Ala Lys Ser Leu Val Asp Ile Asp Leu
                                      10
Ser Ser Leu Arg Asp Pro Ala Gly Ile Phe Glu Leu Val Glu Val
                 20
                                      25
Val Gly Asn Gly Thr Tyr Gly Gln Val Tyr Lys Gly Arg His Val
                 35
                                      40
Lys Thr Gly Gln Leu Ala Ala Ile Lys Val Met Asp Val Thr Glu
                                      55
                 50
                                                           60
Asp Glu Glu Glu Ile Lys Leu Glu Ile Asn Met Leu Lys Lys
                                                           75
Tyr Ser His His Arg Asn Ile Ala Thr Tyr Tyr Gly Ala Phe Ile
                 80
                                      85
                                                           90
Lys Lys Ser Pro Pro Gly His Asp Asp Gln Leu Trp Leu Val Met
                 95
                                     100
Glu Phe Cys Gly Ala Gly Ser Ile Thr Asp Leu Val Lys Asn Thr
                110
                                     115
Lys Gly Asn Thr Leu Lys Glu Asp Trp Ile Ala Tyr Ile Ser Arg
                125
                                     130
                                                          135
Glu Ile Leu Arg Gly Leu Ala His Leu His Ile His His Val Ile
                140
                                     145
His Arg Asp Ile Lys Gly Gln Asn Val Leu Leu Thr Glu Asn Ala
                155
                                     160
Gly Val Lys Leu Val Asp Phe Gly Val Ser Ala Gln Leu Asp Arg
                170
                                     175
Thr Val Gly Arg Arg Asn Thr Phe Ile Gly Thr Pro Tyr Trp Met
                                     190
                185
Ala Pro Glu Val Ile Ala Cys Asp Glu Asn Pro Asp Ala Thr Tyr
                200
                                     205
                                                          210
Asp Tyr Arg Ser Asp Leu Trp Ser Cys Gly Ile Thr Ala Ile Glu
                215
                                     220
Met Ala Glu Gly Ala Pro Pro Leu Cys Asp Met His Pro Met Arg
                230
                                     235
                                                          240
Ala Leu Phe Leu Ile Pro Arg Asn Pro Pro Pro Arg Leu Lys Ser
                245
                                     250
Lys Lys Trp Ser Lys Lys Phe Phe Ser Phe Ile Glu Gly Cys Leu
                260
                                     265
Val Lys Asn Tyr Met Gln Arg Pro Ser Thr Glu Gln Leu Leu Lys
                275
                                     280
                                                          285
His Pro Phe Ile Arg Asp Gln Pro Asn Glu Arg Gln Val Arg Ile
                290
                                     295
Gln Leu Lys Asp His Ile Asp Arg Thr Arg Lys Lys Arg Gly Glu
                305
                                     310
                                                          315
Lys Asp Glu Thr Glu Tyr Glu Tyr Ser Gly Ser Glu Glu Glu Glu
                320
                                     325
                                                          330
Glu Glu Val Pro Glu Gln Glu Gly Glu Pro Ser Ser Ile Val Asn
                335
                                     340
Val Pro Gly Glu Ser Thr Leu Arg Arg Asp Phe Leu Arg Leu Gln
                350
                                     355
                                                          360
Gln Glu Asn Lys Glu Arg Ser Glu Ala Leu Arg Arg Gln Gln Leu
                365
                                     370
                                                          375
```

Leu	Gln	Glu	Gln	Gln 380	Leu	Arg	Glu	Gln	Glu 385	Glu	Tyr	Lys	Arg	Gln 390
Leu	Leu	Ala	Glu		Gln	Lys	Arg	Ile		Gln	Gln	Lys	Glu	
Arg	Arg	Arg	Leu	Glu	Glu	Gln	Gln	Arg	Arg	Glu	Arg	Glu	Ala	Arg
Arg	Gln	Gln	Glu	_	Glu	Gln	Arg	Arg	_	Glu	Gln	Glu	Glu	_
Arg	Arg	Leu	Glu		Leu	Glu	Arg	Arg	_	Lys	Glu	Glu	Glu	
Arg	Arg	Arg	Ala		Glu	Glu	Lys	Arg	445 Arg	Val	Glu	Arg	Glu	
Glu	Tyr	Ile	Arg	455 Arg	Gln	Leu	Glu	Glu		Gln	Arg	His	Leu	465 Glu
Val	Leu	Gln	Gln	470 Gln	Leu	Leu	Gln	Glu	475 Gln	Ala	Met	Leu	Leu	480 His
Asp) His	Ara	Ara	485 Pro	His	Pro	Gln	His	490 Ser	Gln	Gln	Pro	Pro	495 Pro
_		_	_	500	Ser				505					510
				515					520					525
-			-	530	Pro		-	_	535	_				540
Arg	Thr	Thr	Ser	Arg 545	Ser	Pro	Val	Leu	Ser 550	Arg	Arg	Asp	Ser	Pro 555
Leu	Gln	Gly	Ser	Gly 560	Gln	Gln	Asn	Ser	Gln 565	Ala	Gly	Gln	Arg	Asn 570
Ser	Thr	Ser	Ile	Glu 575	Pro	Arg	Leu	Leu	Trp 580	Glu	Arg	Va1	Glu	Lys 585
Leu	Val	Pro	Arg		Gly	Ser	Gly	Ser		Ser	Gly	Ser	Ser	
Ser	Gly	Ser	Gln		Gly	Ser	His	Pro		Ser	Gln	Ser	Gly	
Gly	G1u	Arg	Phe		Val	Arg	Ser	Ser		Lys	Ser	Glu	Gly	
Pro	Ser	Gln	Arg		Glu	Asn	Ala	Val		Lys	Pro	Glu	Asp	
Lys	Glu	Val	Phe		Pro	Leu	Lys	Pro		Asp	Leu	Thr	Ala	
Ala	Lys	Glu	Leu	Arg	Ala	Val	Glu	Asp	Val	Arg	Pro	Pro	His	Lys
Val	Thr	Asp	Tyr		Ser	Ser	Ser	Glu		Ser	Gly	Thr	Thr	_
Glu	Glu	Asp	Asp		Val	Glu	Gln	Glu		Ala	Asp	Glu	Ser	
Ser	Gly	Pro	Glu		Thr	Arg	Ala	Ala		Ser	Leu	Asn	Leu	
Asn	Gly	Glu	Thr		Ser	Val	Lys	Thr		Ile	Val	His	Asp	_
Val	Glu	Ser	Glu		Ala	Met	Thr	Pro		Lys	Glu	Gly	Thr	
Ile	Val	Arg	Gln		Gln	Ser	Ala	Ser		Thr	Leu	Gln	Lys	
Lys	Ser	Ser	Ser		Phe	Thr	Pro	Phe		Asp	Pro	Arg	Leu	
Gln	Ile	Ser	Pro	770 Ser	Ser	Gly	Thr	Thr	775 Val	Thr	Ser	Val	Val	780 Gly
Phe	Ser	Cys	Asp	785 Gly	Met	Arg	Pro	Glu	790 Ala	Ile	Arg	Gln	Asp	795 Pro
Thr	Arg	Lys	Gly	800 Ser	Val	Val	Asn	Val	805 Asn	Pro	Thr	Asn	Thr	810 Arg
	_		_											_

```
Pro Gln Ser Asp Thr Pro Glu Ile Arg Lys Tyr Lys Lys Arg Phe
                830
                                    835
Asn Ser Glu Ile Leu Cys Ala Ala Leu Trp Gly Val Asn Leu Leu
                845
                                    850
                                                         855
Val Gly Thr Glu Ser Gly Leu Met Leu Leu Asp Arg Ser Gly Gln
                860
                                    865
Gly Lys Val Tyr Pro Leu Ile Asn Arg Arg Phe Gln Gln Met
                875
                                    880
                                                         885
Asp Val Leu Glu Gly Leu Asn Val Leu Val Thr Ile Ser Gly Lys
                890
                                    895
Lys Asp Lys Leu Arg Val Tyr Tyr Leu Ser Trp Leu Arg Asn Lys
                905
                                    910
Ile Leu His Asn Asp Pro Glu Val Glu Lys Lys Gln Gly Trp Thr
                920
                                     925
                                                         930
Thr Val Gly Asp Leu Glu Gly Cys Val His Tyr Lys Val Val Lys
                935
                                     940
                                                         945
Tyr Glu Arg Ile Lys Phe Leu Val Ile Ala Leu Lys Ser Ser Val
                950
                                     955
                                                         960
Glu Val Tyr Ala Trp Ala Pro Lys Pro Tyr His Lys Phe Met Ala
                                    970
                965
Phe Lys Ser Phe Gly Glu Leu Val His Gly Ser Cys Ala Gly Phe
                980
                                    985
His Ala Val Asp Val Asp Ser Gly Ser Val Tyr Asp Ile Tyr Leu
                995
                                   1000
                                                        1005
Pro Thr His Ile Gln Cys Ser Ile Lys Pro His Ala Ile Ile Ile
               1010
                                   1015
                                                        1020
Leu Pro Asn Thr Asp Gly Met Glu Leu Leu Val Cys Tyr Glu Asp
               1025
                                   1030
Glu Gly Val Tyr Val Asn Thr Tyr Gly Arg Ile Thr Lys Asp Val
               1040
                                   1045
                                                        1050
Val Leu Gln Trp Gly Glu Met Pro Thr Ser Val Ala Tyr Ile Arg
               1055
                                   1060
Ser Asn Gln Thr Met Gly Trp Gly Glu Lys Ala Ile Glu Ile Arg
               1070
                                   1075
                                                        1080
Ser Val Glu Thr Gly His Leu Asp Gly Val Phe Met His Lys Arg
               1085
                                    1090
                                                        1095
Ala Gln Arg Leu Lys Phe Leu Cys Glu Arg Asn Asp Lys Val Phe
                                   1105
               1100
Phe Ala Ser Val Arg Ser Gly Gly Ser Ser Gln Val Tyr Phe Met
               1115
                                    1120
                                                        1125
Thr Leu Gly Arg Thr Ser Leu Leu Ser Trp
               1130
<210> 17
<211> 228
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 209854CD1
<400> 17
Met Pro Thr Asn Cys Ala Ala Ala Gly Cys Ala Thr Thr Tyr Asn
                  5
                                     10
Lys His Ile Asn Ile Ser Phe His Arg Phe Pro Leu Asp Pro Lys
                                      25
Arg Arg Lys Glu Trp Val Arg Leu Val Arg Arg Lys Asn Phe Val
```

```
Pro Gly Lys His Thr Phe Leu Cys Ser Lys His Phe Glu Ala Ser
                 50
                                      55
Cys Phe Asp Leu Thr Gly Gln Thr Arg Arg Leu Lys Met Asp Ala
                 65
                                      70
Val Pro Thr Ile Phe Asp Phe Cys Thr His Ile Lys Ser Met Lys
                 80
                                      85
Leu Lys Ser Arg Asn Leu Leu Lys Lys Asn Asn Ser Cys Ser Pro
                 95
                                     100
                                                          105
Ala Gly Pro Ser Asn Leu Lys Ser Asn Ile Ser Ser Gln Gln Val
                110
                                     115
                                                          120
Leu Leu Glu His Ser Tyr Ala Phe Arg Asn Pro Met Glu Ala Lys
                125
                                     130
                                                          135
Lys Arg Ile Ile Lys Leu Glu Lys Glu Ile Ala Ser Leu Arg Arg
                140
                                     145
                                                          150
Lys Met Lys Thr Cys Leu Gln Lys Glu Arg Arg Ala Thr Arg Arg
                155
                                     160
                                                          165
Trp Ile Lys Ala Thr Cys Leu Val Lys Asn Leu Glu Ala Asn Ser
                170
                                     175
Val Leu Pro Lys Gly Thr Ser Glu His Met Leu Pro Thr Ala Leu
                185
                                     190
                                                          195
Ser Ser Leu Pro Leu Glu Asp Phe Lys Ile Leu Glu Gln Asp Gln
                200
                                     205
Gln Asp Lys Thr Leu Leu Ser Leu Asn Leu Lys Gln Thr Lys Ser
                215
                                     220
Thr Phe Ile
<210> 18
<211> 503
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 1384286CD1
<400> 18
Met Ala Thr Thr Val Thr Cys Thr Arg Phe Thr Asp Glu Tyr Gln
Leu Tyr Glu Asp Ile Gly Lys Gly Ala Phe Ser Val Val Arg Arg
                                      25
                 2.0
                                                           30
Cys Val Lys Leu Cys Thr Gly His Glu Tyr Ala Ala Lys Ile Ile
                 35
                                      40
Asn Thr Lys Lys Leu Ser Ala Arg Asp His Gln Lys Leu Glu Arg
                 50
                                      55
                                                           60
Glu Ala Arg Ile Cys Arg Leu Leu Lys His Ser Asn Ile Val Arg
                 65
                                      70
Leu His Asp Ser Ile Ser Glu Glu Gly Phe His Tyr Leu Val Phe
                 80
                                      85
Asp Leu Val Thr Gly Gly Glu Leu Phe Glu Asp Ile Val Ala Arg
                 95
                                     100
                                                          105
Glu Tyr Tyr Ser Glu Ala Asp Ala Ser His Cys Ile Gln Gln Ile
                110
                                     115
Leu Glu Ala Val Leu His Cys His Gln Met Gly Val Val His Arg
                                                          135
                125
                                     130
Asp Leu Lys Pro Glu Asn Leu Leu Leu Ala Ser Lys Cys Lys Gly
                140
                                     145
                                                          150
Ala Ala Val Lys Leu Ala Asp Phe Gly Leu Ala Ile Glu Val Gln
```

```
155
                                     160
Gly Asp Gln Gln Ala Trp Phe Gly Phe Ala Gly Thr Pro Gly Tyr
                170
                                     175
Leu Ser Pro Glu Val Leu Arg Lys Glu Ala Tyr Gly Lys Pro Val
                185
                                     190
                                                          195
Asp Ile Trp Ala Cys Gly Val Ile Leu Tyr Ile Leu Leu Val Gly
                200
                                     205
                                                          210
Tyr Pro Pro Phe Trp Asp Glu Asp Gln His Lys Leu Tyr Gln Gln
                215
                                     220
Ile Lys Ala Gly Ala Tyr Asp Phe Pro Ser Pro Glu Trp Asp Thr
                230
                                     235
                                                          240
Val Thr Pro Glu Ala Lys Asn Leu Ile Asn Gln Met Leu Thr Ile
                245
                                     250
                                                          255
Asn Pro Ala Lys Arg Ile Thr Ala His Glu Ala Leu Lys His Pro
                260
                                     265
                                                          270
Trp Val Cys Gln Arg Ser Thr Val Ala Ser Met Met His Arg Gln
                                     280
                275
                                                          285
Glu Thr Val Glu Cys Leu Lys Lys Phe Asn Ala Arg Arg Lys Leu
                                     295
Lys Gly Ala Ile Leu Thr Thr Met Leu Ala Thr Arg Asn Phe Ser
                305
                                     310
                                                          315
Ala Ala Lys Ser Leu Leu Asn Lys Lys Ala Asp Gly Val Lys Pro
                320
                                     325
His Thr Asn Ser Thr Lys Asn Ser Ala Ala Ala Thr Ser Pro Lys
                335
                                     340
Gly Thr Leu Pro Pro Ala Ala Leu Glu Ser Ser Asp Ser Ala Asn
                350
                                     355
Thr Thr Ile Glu Asp Glu Asp Ala Lys Ala Arg Lys Gln Glu Ile
                365
                                     370
Ile Lys Thr Thr Glu Gln Leu Ile Glu Ala Val Asn Asn Gly Asp
                380
                                     385
Phe Glu Ala Tyr Ala Lys Ile Cys Asp Pro Gly Leu Thr Ser Phe
                395
                                     400
Glu Pro Glu Ala Leu Gly Asn Leu Val Glu Gly Met Asp Phe His
                410
                                     415
Arg Phe Tyr Phe Glu Asn Leu Leu Ala Lys Asn Ser Lys Pro Ile
                425
                                     430
                                                          435
His Thr Thr Ile Leu Asn Pro His Val His Val Ile Gly Glu Asp
                440
                                     445
                                                          450
Ala Ala Cys Ile Ala Tyr Ile Arg Leu Thr Gln Tyr Ile Asp Gly
                455
                                     460
Gln Gly Arg Pro Arg Thr Ser Gln Ser Glu Glu Thr Arg Val Trp
                470
                                     475
His Arg Arg Asp Gly Lys Trp Gln Asn Val His Phe His Cys Ser
                485
                                     490
Gly Ala Pro Val Ala Pro Leu Gln
                500
<210> 19
<211> 433
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 1512656CD1
<400> 19
```

Met Thr Gly Glu Ala Gln Ala Gly Arg Lys Arg Ser Arg Ala Arg

1				5					10					15
_	Glu	Gly	Thr	Glu 20	Pro	Val	Arg	Arg		Arg	Thr	Gln	Pro	
Leu	Gly	Pro	G 1 y	Arg 35	Ala	Arg	Ala	Met	Ala 40	Ala	Glu	Ala	Thr	Ala 45
Val	Ala	Gly	Ser	Gly 50	Ala	Val	Gly	Gly	Cys 55	Leu	Ala	Lys	Asp	Gly 60
Leu	Gln	Gln	Ser	Lys 65	Cys	Pro	Asp	Thr	Thr 70	Pro	Lys	Arg	Arg	Arg 75
Ala	Ser	Ser	Leu	Ser 80	Arg	Asp	Ala	Glu	Arg 85	Arg	Ala	Tyr	Gln	Trp 90
Cys	Arg	Glu	Tyr	Leu 95	G1y	Gly	Ala	Trp	Arg 100	Arg	Val	Gln	Pro	Glu 105
Glu	Leu	Arg	Val	Tyr 110	Pro	Val	Ser	Gly	Gly 115	Leu	Ser	Asn	Leu	Leu 120
Phe	Arg	Cys	Ser	Leu 125	Pro	Asp	His	Leu	Pro 130	Ser	Val	Gly	Glu	Glu 135
Pro	Arg	Glu	Val	Leu 140	Leu	Arg	Leu	Tyr	Gly 145	Ala	Ile	Leu	Gln	Gly 150
Val	Asp	Ser	Leu	Val 155	Leu	Glu	Ser	Val	Met 160	Phe	Ala	Ile	Leu	Ala 165
Glu	Arg	Ser	Leu	Gly 170	Pro	Gln	Leu	Tyr	Gly 175	Val	Phe	Pro	Glu	Gly 180
Arg	Leu	Glu	Gln	Tyr 185	Ile	Pro	Ser	Arg	Pro 190	Leu	Lys	Thr	Gln	Glu 195
Leu	Arg	Glu	Pro	Val 200	Leu	Ser	Ala	Ala	Ile 205	Ala	Thr	Lys	Met	Ala 210
Gln	Phe	His	Gly	Met 215	Glu	Met	Pro	Phe	Thr 220	Lys	Glu	Pro	His	Trp 225
Leu	Phe	Gly	Thr	Met 230	Glu	Arg	Tyr	Leu	Lys 235	Gln	Ile	Gln	Asp	Leu 240
Pro	Pro	Thr	Gly	Leu 245	Pro	Glu	Met	Asn	Leu 250	Leu	Glu	Met	Tyr	Ser 255
Leu	Lys	Asp	Glu	Met 260	Gly	Asn	Leu	Arg	Lys 265	Leu	Leu	Glu	Ser	Thr 270
Pro	Ser	Pro	Val	Val 275	Phe	Cys	His	Asn	Asp 280	Ile	Gln	Glu	Gly	Asn 285
Ile	Leu	Leu	Leu	Ser 290	Glu	Pro	Glu	Asn	Ala 295	Asp	Ser	Leu	Met	Leu 300
Val	Asp	Phe	Glu	Tyr 305	Ser	Ser	Tyr	Asn	Tyr 310	Arg	Gly	Phe	Asp	Ile 315
Gly	Asn	His	Phe	Cys 320	Glu	Trp	Val	Tyr	Asp 325	Tyr	Thr	His	Glu	Glu 330
Trp	Pro	Phe	Tyr	Lys 335	Ala	Arg	Pro	Thr	Asp 340	Tyr	Pro	Thr	Gln	G1u 345
			His	350					355				_	360
Gly	Glu	Thr	Leu	Ser 365	Gln	Glu	Glu	Gln	Arg 370	Lys	Leu	Glu	Glu	Asp 375
		•	Glu	380		_			385					390
Trp	Gly	Leu	Trp	Ser 395	Ile	Leu	Gln	Ala	Ser 400	Met	Ser	Thr	Ile	Glu 405
Phe	Gly	Tyr	Leu	Asp 410	Tyr	Ala	Gln	Ser	Arg 415	Phe	Gln	Phe	Tyr	Phe 420
Gln	Gln	Lys	Gly	Gln 425	Leu	Thr	Ser	Val	His 430	Ser	Ser	Ser		

```
<211> 527
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2098635CD1
<400> 20
Met Ser Leu Cys Gly Ala Arg Ala Asn Ala Lys Met Met Ala Ala
                                     10
Tyr Asn Gly Gly Thr Ser Ala Ala Ala Gly His His His His
His His His Leu Pro His Leu Pro Pro Pro His Leu Leu His
                 35
                                     40
His His His Pro Gln His His Leu His Pro Gly Ser Ala Ala Ala
                 50
Val His Pro Val Gln Gln His Thr Ser Ser Ala Ala Ala Ala Ala
                                     70
Ala Ala Ala Ala Ala Ala Ala Met Leu Asn Pro Gly Gln Gln
                 80
                                     85
Gln Pro Tyr Phe Pro Ser Pro Ala Pro Gly Gln Ala Pro Gly Pro
                                    100
                 95
Ala Ala Ala Aro Ala Gln Val Gln Ala Ala Ala Ala Thr
                110
                                    115
Val Lys Ala His His Gln His Ser His His Pro Gln Gln Gln
                125
                                    130
                                                         135
Leu Asp Ile Glu Pro Asp Arg Pro Ile Gly Tyr Gly Ala Phe Gly
                140
                                    145
Val Val Trp Ser Val Thr Asp Pro Arg Asp Gly Lys Arg Val Ala
                155
                                    160
                                                         165
Leu Lys Lys Met Pro Asn Val Phe Gln Asn Leu Val Ser Cys Lys
                170
                                    175
                                                         180
Arg Val Phe Arg Glu Leu Lys Met Leu Cys Phe Phe Lys His Asp
                185
                                    190
                                                         195
Asn Val Leu Ser Ala Leu Asp Ile Leu Gln Pro Pro His Ile Asp
                200
                                    205
                                                         210
Tyr Phe Glu Glu Ile Tyr Val Val Thr Glu Leu Met Gln Ser Asp
                                    220
                215
Leu His Lys Ile Ile Val Ser Pro Gln Pro Leu Ser Ser Asp His
                230
                                    235
Val Lys Val Phe Leu Tyr Gln Ile Leu Arg Gly Leu Lys Tyr Leu
                                    250
                245
His Ser Ala Gly Ile Leu His Arg Asp Ile Lys Pro Gly Asn Leu
                260
                                    265
Leu Val Asn Ser Asn Cys Val Leu Lys Ile Cys Asp Phe Gly Leu
                275
                                    280
Ala Arg Val Glu Glu Leu Asp Glu Ser Arg His Met Thr Gln Glu
                290
                                    295
Val Val Thr Gln Tyr Tyr Arg Ala Pro Glu Ile Leu Met Gly Ser
                305
                                    310
                                                         315
Arg His Tyr Ser Asn Ala Ile Asp Ile Trp Ser Val Gly Cys Ile
                320
                                    325
Phe Ala Glu Leu Leu Gly Arg Arg Ile Leu Phe Gln Ala Gln Ser
                335
                                    340
Pro Ile Gln Gln Leu Asp Leu Ile Thr Asp Leu Leu Gly Thr Pro
                350
                                    355
                                                         360
Ser Leu Glu Ala Met Arg Thr Ala Cys Glu Gly Ala Lys Ala His
                                    370
                365
```

```
380
                                     385
Thr Leu Ser Ser Gln Ala Thr His Glu Ala Val His Leu Leu Cys
                395
                                     400
                                                         405
Arg Met Leu Val Phe Asp Pro Ser Lys Arg Ile Ser Ala Lys Asp
                                     415
                410
                                                         420
Ala Leu Ala His Pro Tyr Leu Asp Glu Gly Arg Leu Arg Tyr His
                425
                                     430
Thr Cys Met Cys Lys Cys Cys Phe Ser Thr Ser Thr Gly Arg Val
                440
                                     445
                                                         450
Tyr Thr Ser Asp Phe Glu Pro Val Thr Asn Pro Lys Phe Asp Asp
                455
                                     460
Thr Phe Glu Lys Asn Leu Ser Ser Val Arg Gln Val Lys Glu Ile
                470
                                     475
Ile His Gln Phe Ile Leu Glu Gln Gln Lys Gly Asn Arg Val Pro
                485
                                     490
Leu Cys Ile Asn Pro Gln Ser Ala Ala Phe Lys Ser Phe Ile Ser
                500
                                     505
                                                         510
Ser Thr Val Ala Gln Pro Ser Glu Met Pro Pro Ser Pro Leu Val
                515
                                     520
Trp Glu
<210> 21
<211> 322
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2446646CD1
<400> 21
Met Glu Gly Ile Ser Asn Phe Lys Thr Pro Ser Lys Leu Ser Glu
                                      10
Lys Lys Lys Ser Val Leu Cys Ser Thr Pro Thr Ile Asn Ile Pro
                 20
                                      25
Ala Ser Pro Phe Met Gln Lys Leu Gly Phe Gly Thr Gly Val Asn
Val Tyr Leu Met Lys Arg Ser Pro Arg Gly Leu Ser His Ser Pro
                 50
                                      55
                                                          60
Trp Ala Val Lys Lys Ile Asn Pro Ile Cys Asn Asp His Tyr Arg
Ser Val Tyr Gln Lys Arg Leu Met Asp Glu Ala Lys Ile Leu Lys
                 80
                                      85
Ser Leu His His Pro Asn Ile Val Gly Tyr Arg Ala Phe Thr Glu
                 95
                                     100
Ala Asn Asp Gly Ser Leu Cys Leu Ala Met Glu Tyr Gly Glu
                110
                                     115
Lys Ser Leu Asn Asp Leu Ile Glu Glu Arg Tyr Lys Ala Ser Gln
                125
                                     130
                                                         135
Asp Pro Phe Pro Ala Ala Ile Ile Leu Lys Val Ala Leu Asn Met
                140
                                     145
Ala Arg Gly Leu Lys Tyr Leu His Gln Glu Lys Lys Leu Leu His
                155
                                     160
Gly Asp Ile Lys Ser Ser Asn Val Val Ile Lys Gly Asp Phe Glu
                170
                                     175
                                                         180
Thr Ile Lys Ile Cys Asp Val Gly Val Ser Leu Pro Leu Asp Glu
                                     190
                185
                                                         195
```

Ile Leu Arg Gly Pro His Lys Gln Pro Ser Leu Pro Val Leu Tyr

```
Asn Met Thr Val Thr Asp Pro Glu Ala Cys Tyr Ile Gly Thr Glu
                200
                                     205
Pro Trp Lys Pro Lys Glu Ala Val Glu Asn Gly Val Ile Thr
                215
                                    220
Asp Lys Ala Asp Ile Phe Ala Phe Gly Leu Thr Leu Trp Glu Met
                230
                                     235
Met Thr Leu Ser Ile Pro His Ile Asn Leu Ser Asn Asp Asp Asp
                245
                                     250
Asp Glu Asp Lys Thr Phe Asp Glu Ser Asp Phe Asp Asp Glu Ala
                260
                                     265
                                                         270
Tyr Tyr Ala Ala Leu Gly Thr Arg Pro Pro Ile Asn Met Glu Glu
                275
                                    280
                                                         285
Leu Asp Glu Ser Tyr Gln Lys Val Ile Glu Leu Phe Ser Val Cys
                                                         300
                290
                                     295
Thr Asn Glu Asp Pro Lys Asp Arg Pro Ser Ala Ala His Ile Val
                305
                                    310
Glu Ala Leu Glu Thr Asp Val
                320
<210> 22
<211> 802
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2764911CD1
<400> 22
Met Glu Glu Gly Gly Ser Ser Gly Gly Ala Ala Gly Thr Ser
                                      10
Ala Asp Gly Gly Asp Gly Gly Glu Gln Leu Leu Thr Val Lys His
                 20
                                      25
Glu Leu Arg Thr Ala Asn Leu Thr Gly His Ala Glu Lys Val Gly
                                      40
                                                          45
Ile Glu Asn Phe Glu Leu Leu Lys Val Leu Gly Thr Gly Ala Tyr
                 50
                                      55
                                                          60
Gly Lys Val Phe Leu Val Arg Lys Ile Ser Gly His Asp Thr Gly
Lys Leu Tyr Ala Met Lys Val Leu Lys Lys Ala Thr Ile Val Gln
                 80
                                      85
                                                          90
Lys Ala Lys Thr Thr Glu His Thr Arg Thr Glu Arg Gln Val Leu
                 95
                                     100
Glu His Ile Arg Gln Ser Pro Phe Leu Val Thr Leu His Tyr Ala
                110
                                     115
Phe Gln Thr Glu Thr Lys Leu His Leu Ile Leu Asp Tyr Ile Asn
                                     130
                125
Gly Gly Glu Leu Phe Thr His Leu Ser Gln Arg Glu Arg Phe Thr
                140
                                     145
                                                         150
Glu His Glu Val Gln Ile Tyr Val Gly Glu Ile Val Leu Ala Leu
                155
                                     160
Glu His Leu His Lys Leu Gly Ile Ile Tyr Arg Asp Ile Lys Leu
                170
                                     175
                                                         180
Glu Asn Ile Leu Leu Asp Ser Asn Gly His Val Val Leu Thr Asp
                185
                                     190
Phe Gly Leu Ser Lys Glu Phe Val Ala Asp Glu Thr Glu Arg Ala
                200
                                     205
                                                         210
Tyr Ser Phe Cys Gly Thr Ile Glu Tyr Met Ala Pro Asp Ile Val
                215
                                     220
```

Arg	Gly	Gly	Asp	Ser 230	Gly	His	Asp	Lys	Ala 235	Val	Asp	Trp	Trp	Ser 240
Leu	Gly	Val	Leu		Tyr	Glu	Leu	Leu		Gly	Ala	Ser	Pro	
Thr	Val	Asp	Gly		Lys	Asn	Ser	Gln		Glu	Ile	Ser	Arg	
Ile	Leu	Lys	Ser		Pro	Pro	Tyr	Pro		Glu	Met	Ser	Ala	
Ala	Lys	Asp	Leu		Gln	Arg	Leu	Leu		Lys	Asp	Pro	Lys	
Arg	Leu	Gly	Cys		Pro	Arg	Asp	Ala		Glu	Ile	Lys	Glu	
Leu	Phe	Phe	Gln	Lys 320	Ile	Asn	Trp	Asp		Leu	Ala	Ala	Lys	
Val	Pro	Ala	Pro	Phe 335	Lys	Pro	Val	Ile	Arg 340	Asp	Glu	Leu	Asp	Val 345
Ser	Asn	Phe	Ala	Glu 350	Glu	Phe	Thr	Glu	Met 355	Asp	Pro	Thr	Tyr	Ser 360
Pro	Ala	Ala	Leu	Pro 365	Gln	Ser	Ser	Glu	Lys 370	Leu	Phe	Gln	Gly	Tyr 375
Ser	Phe	Val	Ala	Pro 380	Ser	Ile	Leu	Phe	Lys 385	Arg	Asn	Ala	Ala	Val 390
Ile	Asp	Pro	Leu	Gln 395	Phe	His	Met	Gly	Val 400	Glu	Arg	Pro	Gly	Val 405
Thr	Asn	Val	Ala	Arg 410	Ser	Ala	Met	Met	Lys 415	Asp	Ser	Pro	Phe	Tyr 420
Gln	His	Tyr	Asp	Leu 425	Asp	Leu	Lys	Asp	Lys 430	Pro	Leu	Gly	Glu	Gly 435
Ser	Phe	Ser	Ile	Cys 440	Arg	Lys	Cys	Val	His 445	Lys	Lys	Ser	Asn	Gln 450
Ala	Phe	Ala	Val	Lys 455	Ile	Ile	Ser	Lys	Arg 460	Met	Glu	Ala	Asn	Thr 465
Gln	Lys	Glu	Ile	Thr 470	Ala	Leu	Glu	Leu	Cys 475	Glu	Gly	His	Pro	Asn 480
Ile	Val	Lys	Leu	His 485	Glu	Val	Phe	His	Asp 490	Gln	Leu	His	Thr	Phe 495
Leu	Val	Met	Glu	Leu 500	Leu	Asn	Gly	Gly	Glu 505	Leu	Phe	Glu	Arg	Ile 510
Lys	Lys	Lys	Lys	His 515	Phe	Ser	Glu	Thr	Glu 520	Ala	Ser	Tyr	Ile	Met 525
Arg	Lys	Leu	Val	Ser 530	Ala	Val	Ser	His	Met 535	His	Asp	Val	Gly	Val 540
Val	His	Arg	Asp	Leu 545	Lys	Pro	Glu	Asn	Leu 550	Leu	Phe	Thr	Asp	Glu 555
Asn	Asp	Asn	Leu	Glu 560	Ile	Lys	Ile	Ile	Asp 565	Phe	Gly	Phe	Ala	Arg 570
Leu	Lys	Pro	Pro	Asp 575	Asn	Gln	Pro	Leu	Lys 580	Thr	Pro	Cys	Phe	Thr 585
Leu	His	Tyr	Ala	Ala 590	Pro	Glu	Leu	Leu	Asn 595	Gln	Asn	Gly	Tyr	Asp 600
				605					610				Thr	615
				620					625				Leu	630
				635					640				Gly	645
				650					655				Glu	660
Lys	Asp	Leu	Ile	Gln	Gly	Leu	Leu	Thr	Val	Asp	Pro	Asn	Lys	Arg

```
665
                                     670
Leu Lys Met Ser Gly Leu Arg Tyr Asn Glu Trp Leu Gln Asp Gly
                680
                                     685
                                                          690
Ser Gln Leu Ser Ser Asn Pro Leu Met Thr Pro Asp Ile Leu Gly
                                     700
                695
                                                          705
Ser Ser Gly Ala Ala Val His Thr Cys Val Lys Ala Thr Phe His
                710
                                     715
Ala Phe Asn Lys Tyr Lys Arg Glu Gly Phe Cys Leu Gln Asn Val
                725
                                     730
                                                          735
Asp Lys Ala Pro Leu Ala Lys Arg Arg Lys Met Lys Lys Thr Ser
                740
                                     745
                                                          750
Thr Ser Thr Glu Thr Arg Ser Ser Ser Ser Glu Ser Ser His Ser
                755
                                     760
Ser Ser Ser His Ser His Gly Lys Thr Thr Pro Thr Lys Thr Leu
                770
                                     775
                                                          780
Gln Pro Ser Asn Pro Ala Asp Ser Asn Asn Pro Glu Thr Leu Phe
                                     790
                785
                                                          795
Gln Phe Ser Asp Ser Val Ala
                800
<210> 23
<211> 641
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 3013946CD1
<400> 23
Met Ala Thr Thr Val Thr Cys Thr Arg Phe Thr Asp Glu Tyr Gln
                                      10
Leu Tyr Glu Asp Ile Gly Lys Gly Ala Phe Ser Val Val Arg Arg
                 20
                                      25
Cys Val Lys Leu Cys Thr Gly His Glu Tyr Ala Ala Lys Ile Ile
                 35
                                      40
                                                           45
Asn Thr Lys Lys Leu Ser Ala Arg Asp His Gln Lys Leu Glu Arg
                 50
                                      55
                                                           60
Glu Ala Arg Ile Cys Arg Leu Leu Lys His Ser Asn Ile Val Arg
                 65
Leu His Asp Ser Ile Ser Glu Glu Gly Phe His Tyr Leu Val Phe
                 80
                                      85
Asp Leu Val Thr Gly Gly Glu Leu Phe Glu Asp Ile Val Ala Arg
                 95
                                     100
Glu Tyr Tyr Ser Glu Ala Asp Ala Ser His Cys Ile Gln Gln Ile
                110
                                     115
Leu Glu Ala Val Leu His Cys His Gln Met Gly Val Val His Arg
                125
                                     130
                                                          135
Asp Leu Lys Pro Glu Asn Leu Leu Ala Ser Lys Cys Lys Gly
                140
                                     145
Ala Ala Val Lys Leu Ala Asp Phe Gly Leu Ala Ile Glu Val Gln
                155
                                     160
                                                          165
Gly Asp Gln Gln Ala Trp Phe Gly Phe Ala Gly Thr Pro Gly Tyr
                170
                                     175
Leu Ser Pro Glu Val Leu Arg Lys Glu Ala Tyr Gly Lys Pro Val
                185
                                     190
                                                          195
Asp Ile Trp Ala Cys Gly Val Ile Leu Tyr Ile Leu Leu Val Gly
                200
                                     205
                                                          210
Tyr Pro Pro Phe Trp Asp Glu Asp Gln His Lys Leu Tyr Gln Gln
```

				215					220					225
Ile	Lys	Ala	Gly		Tyr	Asp	Phe	Pro		Pro	Glu	Trp	Asp	
Val	Thr	Pro	Glu	Ala 245	Lys	Asn	Leu	Ile	Asn 250	Gln	Met	Leu	Thr	Ile 255
Asn	Pro	Ala	Lys	Arg 260	Ile	Thr	Ala	His	Glu 265	Ala	Leu	Lys	His	Pro 270
Trp	Val	Cys	Gln	Arg 275	Ser	Thr	Val	Ala	Ser 280	Met	Met	His	Arg	Gln 285
Glu	Thr	Val	Glu	Cys 290	Leu	Lys	Lys	Phe	Asn 295	Ala	Arg	Arg	Lys	Leu 300
_	-			305					310		_		Phe	315
Ala	Lys	Ser	Leu	Leu 320	Asn	Lys	Lys	Ala	Asp 325	Gly	Val	Lys	Pro	Gln 330
				335					340				Lys	345
				350					355				Ile	360
				365					370				Asn	375
				380					385				Asp	390
				395	_	_		_	400				Glu -	405
			_	410					415	_			Pro	420
				425					430				Arg	435
	-			440			_		445			_	Pro	450
	_			455				_	460				Pro	465
	_			470					475	_	_	_	Ser	480^{-}
				485					490				Pro	495
				500					505				Arg Val	510
				515					520				Gly	525
	_	_		530		-			535				Gly	540
				545				_	550				Asn	555
_			_	560				Asn	565			_		570 Ile
				575					580				Gln	585
				590					595				Glu	600
	_	_		605			_		610				His	615
_		_		620	_	_	_	Pro	625		USII	vaı	1112	630
птэ	Cys	SET	ЭтУ	635	FIO	val	лта	FLO	640	GIII				

```
<211> 588
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 067967CD1
Met Gly Gly Thr Ala Arg Gly Pro Gly Arg Lys Asp Ala Gly Pro
                                      10
Pro Gly Ala Gly Leu Pro Pro Gln Gln Arg Arg Leu Gly Asp Gly
                 20
                                      25
Val Tyr Asp Thr Phe Met Met Ile Asp Glu Thr Lys Cys Pro Pro
                 35
                                      40
Cys Ser Asn Val Leu Cys Asn Pro Ser Glu Pro Pro Ser Pro Arg
                                      55
                 50
                                                           60
Arg Leu Asn Met Thr Thr Glu Gln Phe Thr Gly Asp His Thr Gln
                 65
His Phe Leu Asp Gly Gly Glu Met Lys Val Glu Gln Leu Phe Gln
                 80
                                      85
                                                           90
Glu Phe Gly Asn Arg Lys Ser Asn Thr Ile Gln Ser Asp Gly Ile
                 95
                                     100
Ser Asp Ser Glu Lys Cys Ser Pro Thr Val Ser Gln Gly Lys Ser
                110
                                     115
Ser Asp Cys Leu Asn Thr Val Lys Ser Asn Ser Ser Ser Lys Ala
                125
                                     130
                                                          135
Pro Lys Val Val Pro Leu Thr Pro Glu Gln Ala Leu Lys Gln Tyr
                140
                                     145
                                                          150
Lys His His Leu Thr Ala Tyr Glu Lys Leu Glu Ile Ile Asn Tyr
                155
                                     160
Pro Glu Ile Tyr Phe Val Gly Pro Asn Ala Lys Lys Arg His Gly
                170
                                     175
                                                          180
Val Ile Gly Gly Pro Asn Asn Gly Gly Tyr Asp Asp Ala Asp Gly
                                     190
                185
                                                          195
Ala Tyr Ile His Val Pro Arg Asp His Leu Ala Tyr Arg Tyr Glu
                200
                                     205
                                                          210
Val Leu Lys Ile Ile Gly Lys Gly Ser Phe Gly Gln Val Ala Arg
                                     220
                215
Val Tyr Asp His Lys Leu Arg Gln Tyr Val Ala Leu Lys Met Val
                230
                                     235
Arg Asn Glu Lys Arg Phe His Arg Gln Ala Ala Glu Glu Ile Arg
                245
                                     250
Ile Leu Glu His Leu Lys Lys Gln Asp Lys Thr Gly Ser Met Asn
                260
                                     265
Val Ile His Met Leu Glu Ser Phe Thr Phe Arg Asn His Val Cys
                275
                                     280
                                                          285
Met Ala Phe Glu Leu Leu Ser Ile Asp Leu Tyr Glu Leu Ile Lys
                290
                                     295
                                                          300
Lys Asn Lys Phe Gln Gly Phe Ser Val Gln Leu Val Arg Lys Phe
                305
                                     310
                                                          315
Ala Gln Ser Ile Leu Gln Ser Leu Asp Ala Leu His Lys Asn Lys
                320
                                     325
                                                          330
Ile Ile His Cys Asp Leu Lys Pro Glu Asn Ile Leu Leu Lys His
                335
                                     340
His Gly Arg Ser Ser Thr Lys Val Ile Asp Phe Gly Ser Ser Cys
                350
                                     355
                                                          360
Phe Glu Tyr Gln Lys Leu Tyr Thr Tyr Ile Gln Ser Arg Phe Tyr
                365
                                     370
```

```
Asp Ile Trp Ser Phe Gly Cys Ile Leu Ala Glu Leu Leu Thr Gly
                395
                                     400
                                                         405
Gln Pro Leu Phe Pro Gly Glu Asp Glu Gly Asp Gln Leu Ala Cys
                                     415
                410
                                                         420
Met Met Glu Leu Cly Met Pro Pro Lys Leu Clu Gln
                425
                                     430
Ser Lys Arg Ala Lys Tyr Phe Ile Asn Ser Lys Gly Ile Pro Arg
                440
                                     445
                                                         450
Tyr Cys Ser Val Thr Thr Gln Ala Asp Gly Arg Val Val Leu Val
                455
                                     460
Gly Gly Arg Ser Arg Arg Gly Lys Lys Arg Gly Pro Pro Gly Ser
                470
                                     475
Lys Asp Trp Gly Thr Ala Leu Lys Gly Cys Asp Asp Tyr Leu Phe
                485
                                     490
                                                         495
Ile Glu Phe Leu Lys Arg Cys Leu His Trp Asp Pro Ser Ala Arg
                500
                                     505
                                                         510
Leu Thr Pro Ala Gln Ala Leu Arg His Pro Trp Ile Ser Lys Ser
                                     520
Val Pro Arg Pro Leu Thr Thr Ile Asp Lys Val Ser Gly Lys Arg
                530
                                     535
Val Val Asn Pro Ala Ser Ala Phe Gln Gly Leu Gly Ser Lys Leu
                545
                                     550
Pro Pro Val Val Gly Ile Ala Asn Lys Leu Lys Ala Asn Leu Met
                560
                                     565
                                                         570
Ser Glu Thr Asn Gly Ser Ile Pro Leu Cys Ser Val Leu Pro Lys
                575
                                     580
                                                         585
Leu Ile Ser
<210> 25
<211> 389
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 346275CD1
<400> 25
Met Ser Asp Val Cys Ser Ser Gln Arg Ala Glu His Glu His Leu
                                      10
                                                          15
Pro Gly Leu Val Pro Pro Pro Ser Gly Met Gly Val Arg Lys Gly
                                                          30
                 20
                                      25
Ser Ser Pro Leu Lys Ser His Pro Cys Arg Glu Lys Ser Val Ser
                 35
                                      40
Asn Arg Arg Ser Gly Lys Thr Ile Val Arg Ser Ala Val Glu Glu
                 50
                                      55
Val Arg Thr Ala Gly Leu Phe Arg Ser Gly Phe Ser Glu Glu Lys
                 65
                                      70
                                                           75
Ala Thr Gly Lys Leu Phe Ala Val Lys Cys Ile Pro Lys Lys Ala
                                      85
                 80
Leu Lys Gly Lys Glu Ser Ser Ile Glu Asn Glu Ile Ala Val Leu
                 95
                                     100
Arg Lys Ile Lys His Glu Asn Ile Val Ala Leu Glu Asp Ile Tyr
                110
                                     115
                                                         120
Glu Ser Pro Asn His Leu Tyr Leu Val Met Gln Leu Val Ser Gly
                125
                                     130
                                                         135
```

Arg Ala Pro Glu Ile Ile Leu Gly Ser Arg Tyr Ser Thr Pro Ile

```
Gly Glu Leu Phe Asp Arg Ile Val Glu Lys Gly Phe Tyr Thr Glu
                 140
                                      145
Lys Asp Ala Ser Thr Leu Ile Arg Gln Val Leu Asp Ala Val Tyr
                 155
                                      160
Tyr Leu His Arg Met Gly Ile Val His Arg Asp Leu Lys Pro Glu
                                      175
                 170
Asn Leu Leu Tyr Tyr Ser Gln Asp Glu Glu Ser Lys Ile Met Ile
                 185
                                      190
Ser Asp Phe Gly Leu Ser Lys Met Glu Gly Lys Gly Asp Val Met
                 200
                                      205
                                                           210
Ser Thr Ala Cys Gly Thr Pro Gly Tyr Val Ala Pro Glu Val Leu
                 215
                                      220
                                                           225
Ala Gln Lys Pro Tyr Ser Lys Ala Val Asp Cys Trp Ser Ile Gly
                 230
                                      235
                                                           240
Val Ile Ala Tyr Ile Leu Leu Cys Gly Tyr Pro Pro Phe Tyr Asp
                 245
                                      250
                                                          255
Glu Asn Asp Ser Lys Leu Phe Glu Gln Ile Leu Lys Ala Glu Tyr
                 260
                                      265
Glu Phe Asp Ser Pro Tyr Trp Asp Asp Ile Ser Asp Ser Ala Lys
                 275
                                      280
                                                           285
Asp Phe Ile Arg Asn Leu Met Glu Lys Asp Pro Asn Lys Arg Tyr
                 290
                                      295
                                                           300
Thr Cys Glu Gln Ala Ala Arg His Pro Trp Ile Ala Gly Asp Thr
                 305
                                      310
Ala Leu Asn Lys Asn Ile His Glu Ser Val Ser Ala Gln Ile Arg
                 320
                                      325
                                                           330
Lys Asn Phe Ala Lys Ser Lys Trp Arg Gln Ala Phe Asn Ala Thr
                 335
                                      340
Ala Val Val Arg His Met Arg Lys Leu His Leu Gly Ser Ser Leu
                 350
                                      355
Asp Ser Ser Asn Ala Ser Val Ser Ser Ser Leu Ser Leu Ala Ser
                                      370
                 365
Gln Lys Asp Cys Ala Tyr Val Ala Lys Pro Glu Ser Leu Ser
                 380
                                      385
<210> 26
<211> 343
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 283746CD1
<400> 26
Met Ile Gly Glu Glu Ala Met Ile Asn Tyr Glu Asn Phe Leu Lys
                                       10
                                                           15
Val Gly Glu Lys Ala Gly Ala Lys Cys Lys Gln Phe Phe Thr Ala
                  20
Lys Val Phe Ala Lys Leu Leu His Thr Asp Ser Tyr Gly Arg Ile
                  35
                                       40
                                                            45
Ser Ile Met Gln Phe Phe Asn Tyr Val Met Arg Lys Val Trp Leu
                                       55
                  50
His Gln Thr Arg Ile Gly Leu Ser Leu Tyr Asp Val Ala Gly Gln
                                       70
Gly Tyr Leu Arg Glu Ser Asp Leu Glu Asn Tyr Ile Leu Glu Leu
                  80
                                       85
                                                           90
Ile Pro Thr Leu Pro Gln Leu Asp Gly Leu Glu Lys Ser Phe Tyr
                                      100
```

```
110
                                     115
Asp Pro Leu Arg Thr Gly Lys Ile Lys Ile Gln Asp Ile Leu Ala
                125
                                     130
Cys Ser Phe Leu Asp Asp Leu Leu Glu Leu Arg Asp Glu Glu Leu
                140
                                     145
                                                          150
Ser Lys Glu Ser Gln Glu Thr Asn Trp Phe Ser Ala Pro Ser Ala
                155
                                     160
                                                          165
Leu Arg Val Tyr Gly Gln Tyr Leu Asn Leu Asp Lys Asp His Asn
                170
                                     175
Gly Met Leu Ser Lys Glu Glu Leu Ser Arg Tyr Gly Thr Ala Thr
                185
                                     190
                                                          195
Met Thr Asn Val Phe Leu Asp Arg Val Phe Gln Glu Cys Leu Thr
                200
                                     205
                                                          210
Tyr Asp Gly Glu Met Asp Tyr Lys Thr Tyr Leu Asp Phe Val Leu
                215
                                     220
Ala Leu Glu Asn Arg Lys Glu Pro Ala Ala Leu Gln Tyr Ile Phe
                230
                                     235
Lys Leu Leu Asp Ile Glu Asn Lys Gly Tyr Leu Asn Val Phe Ser
Leu Asn Tyr Phe Phe Arg Ala Ile Gln Glu Leu Met Lys Ile His
                260
                                     265
Gly Gln Asp Pro Val Ser Phe Gln Asp Val Lys Asp Glu Ile Phe
                275
                                     280
Asp Met Val Lys Pro Lys Asp Pro Leu Lys Ile Ser Leu Gln Asp
                290
                                     295
Leu Ile Asn Ser Asn Gln Gly Asp Thr Val Thr Thr Ile Leu Ile
                305
                                     310
                                                          315
Asp Leu Asn Gly Phe Trp Thr Tyr Glu Asn Arg Glu Ala Leu Val
                320
                                     325
Ala Asn Asp Ser Glu Asn Ser Ala Asp Leu Asp Asp Thr
                335
                                     340
<210> 27
<211> 184
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2696537CD1
<400> 27
Met Gly Asn Gly Met Asn Lys Ile Leu Pro Gly Leu Tyr Ile Gly
                                      10
Asn Phe Lys Asp Ala Arg Asp Ala Glu Gln Leu Ser Lys Asn Lys
                 20
                                      25
Val Thr His Ile Leu Ser Val His Asp Ser Ala Arg Pro Met Leu
                 35
                                      40
Glu Gly Val Lys Tyr Leu Cys Ile Pro Ala Ala Asp Ser Pro Ser
                 50
                                      55
Gln Asn Leu Thr Arg His Phe Lys Glu Ser Ile Lys Phe Ile His
                                                          75
                 65
                                      70
Glu Cys Arg Leu Arg Gly Glu Ser Cys Leu Val His Cys Leu Ala
                                      85
Gly Val Ser Arg Ser Val Thr Leu Val Ile Ala Tyr Ile Met Thr
                 95
                                     100
Val Thr Asp Phe Gly Trp Glu Asp Ala Leu His Thr Val Arg Ala
                110
                                     115
                                                          120
```

Ser Phe Tyr Val Cys Thr Ala Val Arg Lys Phe Phe Phe Leu

```
Gly Arg Ser Cys Ala Asn Pro Asn Val Gly Phe Gln Arg Gln Leu
                125
                                     130
Gln Glu Phe Glu Lys His Glu Val His Gln Tyr Arg Gln Trp Leu
                140
                                     145
Lys Glu Glu Tyr Gly Glu Ser Pro Leu Gln Asp Ala Glu Glu Ala
                155
                                     160
                                                         165
Lys Asn Ile Leu Ala Ala Pro Gly Ile Leu Lys Phe Trp Ala Phe
                170
                                     175
Leu Arg Arg Leu
<210> 28
<211> 118
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 619292CD1
<400> 28
Met Gly Leu Ile Asp Gly Met His Thr His Leu Gly Ala Pro Gly
                                      10
Leu Tyr Ile Gln Thr Leu Leu Pro Gly Ser Pro Ala Ala Ala Asp
                 20
                                      25
Gly Arg Leu Ser Leu Gly Asp Arg Ile Leu Glu Val Asn Gly Ser
                 35
                                      40
Ser Leu Leu Gly Leu Gly Tyr Leu Arg Ala Val Asp Leu Ile Arg
                 50
His Gly Gly Lys Lys Met Arg Phe Leu Val Ala Lys Ser Asp Val
                 65
                                      70
                                                          75
Gly Lys Gln Pro Arg Arg Ser Ile Ser Ala Arg Pro Leu Ser Arg
                                      85
                 80
Gly Ala Ala Arg Thr Pro Pro Gln Ala Arg His Pro Val Pro Pro
                 95
                                     100
Gly Asp Thr Gly Leu Pro Pro Ala Phe Val Pro Val Leu
                110
                                     115
<210> 29
<211> 356
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2054049CD1
<400> 29
Met Val Gly Val Ser Gly Lys Arg Ser Lys Glu Asp Glu Lys Tyr
                                      10
Leu Gln Ala Ile Met Asp Ser Asn Ala Gln Ser His Lys Ile Phe
                 20
                                      25
Ile Phe Asp Ala Arg Pro Ser Val Asn Ala Val Ala Asn Lys Ala
                 35
                                      40
Lys Gly Gly Gly Tyr Glu Ser Glu Asp Ala Tyr Gln Asn Ala Glu
                 50
                                      55
Leu Val Phe Leu Asp Ile His Asn Ile His Val Met Arg Glu Ser
                 65
                                      70
Leu Arg Lys Leu Lys Glu Ile Val Tyr Pro Asn Ile Glu Glu Thr
```

```
His Trp Leu Ser Asn Leu Glu Ser Thr His Trp Leu Glu His Ile
                 95
                                    100
Lys Leu Ile Leu Ala Gly Ala Leu Arg Ile Ala Asp Lys Val Glu
                                    115
                110
Ser Gly Lys Thr Ser Val Val Val His Cys Ser Asp Gly Trp Asp
                125
                                     130
                                                         135
Arg Thr Ala Gln Leu Thr Ser Leu Ala Met Leu Met Leu Asp Gly
                140
                                     145
Tyr Tyr Arg Thr Ile Arg Gly Phe Glu Val Leu Val Glu Lys Glu
                155
                                    160
                                                         165
Trp Leu Ser Phe Gly His Arg Phe Gln Leu Arg Val Gly His Gly
                170
                                    175
Asp Lys Asn His Ala Asp Ala Asp Arg Ser Pro Val Phe Leu Gln
                185
                                     190
Phe Ile Asp Cys Val Trp Gln Met Thr Arg Gln Phe Pro Thr Ala
                200
                                     205
Phe Glu Phe Asn Glu Tyr Phe Leu Ile Thr Ile Leu Asp His Leu
                215
                                     220
Tyr Ser Cys Leu Phe Gly Thr Phe Leu Cys Asn Ser Glu Gln Gln
                230
                                     235
Arg Gly Lys Glu Asn Leu Pro Lys Arg Thr Val Ser Leu Trp Ser
                245
                                     250
                                                         255
Tyr Ile Asn Ser Gln Leu Glu Asp Phe Thr Asn Pro Leu Tyr Gly
                260
                                     265
                                                         270
Ser Tyr Ser Asn His Val Leu Tyr Pro Val Ala Ser Met Arg His
                                    280
                275
Leu Glu Leu Trp Val Gly Tyr Tyr Ile Arg Trp Asn Pro Arg Met
                                     295
                290
Lys Pro Gln Glu Pro Ile His Asn Arg Tyr Lys Glu Leu Leu Ala
                305
                                     310
Lys Arg Ala Glu Leu Gln Lys Lys Val Glu Glu Leu Gln Arg Glu
                320
                                     325
Ile Ser Asn Arg Ser Thr Ser Ser Ser Glu Arg Ala Ser Ser Pro
                335
                                     340
Ala Gln Cys Val Thr Pro Val Gln Thr Val Val
                350
<210> 30
<211> 453
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2843910CD1
<400> 30
Met Ala Gly Ala Gly Phe Gly Cys Pro Ala Gly Gly Asn Asp
                                      10
Phe Gln Trp Cys Phe Ser Gln Val Lys Gly Ala Ile Asp Glu Asp
                 20
                                      25
                                                          30
Val Ala Glu Ala Asp Ile Ile Ser Thr Val Glu Phe Asn Tyr Ser
                                      40
                 35
Gly Asp Leu Leu Ala Thr Gly Asp Lys Gly Gly Arg Val Val Ile
                                      55
Phe Gln Arg Glu Gln Glu Asn Lys Ser Arg Pro His Ser Arg Gly
                                     70
                 65
Glu Tyr Asn Val Tyr Ser Thr Phe Gln Ser His Glu Pro Glu Phe
```

```
Asp Tyr Leu Lys Ser Leu Glu Ile Glu Glu Lys Ile Asn Lys Ile
                 95
                                     100
Arg Trp Leu Pro Gln Gln Asn Ala Ala His Phe Leu Leu Ser Thr
                110
                                     115
                                                         120
Asn Asp Lys Thr Ile Lys Leu Trp Lys Ile Ser Glu Arg Asp Lys
                125
                                     130
                                                         135
Arg Ala Glu Gly Tyr Asn Leu Lys Asp Glu Asp Gly Arg Leu Arg
                140
                                     145
Asp Pro Phe Arg Ile Thr Ala Leu Arg Val Pro Ile Leu Lys Pro
                155
                                     160
Met Asp Leu Met Val Glu Ala Ser Pro Arg Arg Ile Phe Ala Asn
                170
                                     175
Ala His Thr Tyr His Ile Asn Ser Ile Ser Val Asn Ser Asp His
                185
                                     190
                                                         195
Glu Thr Tyr Leu Ser Ala Asp Asp Leu Arg Ile Asn Leu Trp His
                                                         210
                200
                                     205
Leu Glu Ile Thr Asp Arg Ser Phe Asn Ile Val Asp Ile Lys Pro
                                     220
Ala Asn Met Glu Glu Leu Thr Glu Val Ile Thr Ala Ala Glu Phe
                230
                                     235
His Pro His Gln Cys Asn Val Phe Val Tyr Ser Ser Lys Gly
                                     250
                245
Thr Ile Arg Leu Cys Asp Met Arg Ser Ser Ala Leu Cys Asp Arg
                260
                                     265
His Ser Lys Phe Phe Glu Glu Pro Glu Asp Pro Ser Ser Arg Ser
                275
                                     280
Phe Phe Ser Glu Ile Ile Ser Ser Ile Ser Asp Val Lys Phe Ser
                290
                                     295
His Ser Gly Arg Tyr Met Met Thr Arg Asp Tyr Leu Ser Val Lys
                305
                                     310
                                                         315
Val Trp Asp Leu Asn Met Glu Ser Arg Pro Val Glu Thr His Gln
                320
                                     325
                                                         330
Val His Glu Tyr Leu Arg Ser Lys Leu Cys Ser Leu Tyr Glu Asn
                                     340
                335
Asp Cys Ile Phe Asp Lys Phe Glu Cys Cys Trp Asn Gly Ser Asp
                350
                                     355
                                                         360
Ser Ala Ile Met Thr Gly Ser Tyr Asn Asn Phe Phe Arg Met Phe
                                     370
                                                         375
Asp Arg Asp Thr Arg Arg Asp Val Thr Leu Glu Ala Ser Arg Glu
                380
                                     385
                                                         390
Ser Ser Lys Pro Arg Ala Ser Leu Lys Pro Arg Lys Val Cys Thr
                395
                                     400
Gly Gly Lys Arg Arg Lys Asp Glu Ile Ser Val Asp Ser Leu Asp
                410
                                     415
Phe Asn Lys Lys Ile Leu His Thr Ala Trp His Pro Val Asp Asn
                                     430
                425
Val Ile Ala Val Ala Ala Thr Asn Asn Leu Tyr Ile Phe Gln Asp
                440
                                     445
Lys Ile Asn
```

```
<210> 31
```

<211> 1221

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 132240CB1 <400> 31 cttttcctgg aatttctata atggaaagtc cattagaaag tcagccctta gattcagata 60 gaagcatcaa agaatcctct tttgaagaat caaatattga agatccactt attgtaacac 120 cagattgcca agaaaagacc tcaccaaaag gtgtcgagaa ccctgctgta caagagagta 180 accaaaaaat gttaggtcct cctttggagg tgctgaaaac gttagcctct aaaagaaatg 240 ctgttgcttt tcgaagtttt aacagtcata ttaatgcatc caataactca gaaccatcca 300 qaatgaacat gacttettta gatgcaatgg atatttegtg tgeetacagt ggtteatate 360 ccatggctat aacccctact caaaaaagaa gatcctgtat gccacatcag accccaaatc 420 agatcaagtc gggaactcca taccgaactc cgaagagtgt gagaagaggg gtggccccg 480 ttgatgatgg gcgaattcta ggaaccccag actaccttgc acctgagctg ttactaggca 540 gggcccatgg tcctgcggta gactggtggg cacttggagt ttgcttgttt gaatttctaa 600 caggaattcc ccctttcaat gatgaaacac cacaacaagt attccagaat attctgaaaa 660 gagatatece ttggecagaa ggtgaagaaa agttatetga taatgeteaa agtgeagtag 720 aaatactttt aaccattgat gatacaaaga gagctggaat gaaagagcta aaacgtcatc 780 ctctcttcag tgatgtggac tgggaaaatc tgcagcatca gactatgcct ttcatccccc 840 agccagatga tgaaacagat acctcctatt ttgaagccag gaatactgct cagcacctga 900 ctgtatctgg atttagtctg tagcacaaaa attttccttt tagtctagcc ttgtgttata 960 gaatgaactt gcataattat atactcctta atactagatt gatctaaggg ggaaagatca 1020 ttatttaacc tagttcaatg tgcttttaat gtacgttaca gctttcacag agttaaaagg 1080 ctgaaaggaa tatagtcagt aatttatctt aacctcaaaa ctgtatataa atcttcaaag 1140 cttttttcat ttatttattt tgtttattgc actttatgaa aactgaagca tcaataaaat 1200 tagaggacac taaaaaaaaa a <210> 32 <211> 542 <212> DNA <213> Homo sapiens <220> <221> misc_feature <223> Incyte ID No: 2180116CB1 <400> 32 tggccagget gggtccagca gcgcgatggc agetcagcgg etgggcaage gcgtgctgag 60 caagetgeag tetecatege gggeeegegg geeaggggge agteeegggg ggatgeagaa 120 geggeaegeg egegteaeeg teaagtatga eeggegggag etgeagegge ggetggaegt 180 ggagaagtgg atcgacgggc gcctggagga gctgtaccgc ggcatggagg cagacatgcc $240\,$ cgatgagatc aacattgatg aattgttgga gttagagagt gaagaggaga gaagccggaa 300 aatccaggga ctcctgaagt catgtgggaa acctgtcgag gacttcatcc aggagctgct 360 ggcaaagctt caaggcctcc acaggcagcc cggcctccgc cagccaagcc cctcccacga 420 eggeagecte agecectee aggaceggge eeggactget caecectgae cetettgeae 480 tetecetqce ecceqqaeqe eqeecaqett qettqtqtat aaqttqtatt taatqqatte 540 tt 542 <210> 33 <211> 2778 <212> DNA <213> Homo sapiens <220> <221> misc_feature <223> Incyte ID No: 2197671CB1 <220> <221> unsure <222> (1) ... (2778)

<223> a, t, c, g, or other

<400> 33

```
egeggategt egeggeeegg eegteeegte eeaggaagtg geegteetga gegeeatgge 60
tcactccccg gtgcagtcgg gcctgcccgg catgcagaac ctaaaggcag acccagaaga 120
gctttttaca aaactagaga aaattgggaa gggctccttt ggagaggtgt tcaaaggcat 180
tgacaatcgg actcagaaag tggttgccat aaagatcatt gatctggaag aagctgaaga 240
tgagatagag gacattcaac aagaaatcac agtgctgagt cagtgtgaca gtccatatgt 300
aaccaaatat tatggatcct atctgaagga tacaaaatta tggataataa tggaatatct 360
tggtggaggc tccgcactag atctattaga acctggccga ttagatgaaa cccagatcgc 420
tactatatta agagaaatac tgaaaggact cgattatctc cattcggaga agaaaatcca 480
cagagacatt aaagcggcca acgtcctgct gtctgagcat ggcgaggtga agctggcgga 540
ctttggcgtg gctggccagc tgacagacac ccagatcaaa aggaacacct tcgtgggcac 600
cccattctgg atggcacccg aggtcatcaa acagtcggcc tatgactcga aggcagacat 660
ctggtccctg ggcataacag ctattgaact tgcaagaggg gaaccacctc attccgagct 720
quaccccatq aaagttttat teeteattee aaagaacaac eeacegaegt tggaaggaaa 780
ctacagtaaa cccctcaagg agtttgtgga ggcctgtttg aataaggagc cgagctttag 840
acccactgct aaggagttat tgaagcacaa gtttatacta cgcaatgcaa agaaaacttc 900
ctacttgacc gagetcateg acaggtacaa gagatggaag geegageaga geeatgaega 960
ctcgagctcc gaggattccg acgcggaaac agatggccaa gcctcggggg gcagtgattc 1020
tggggactgg atcttcacaa tccgagaaaa agatcccaag aatctcgaga atggagctct 1080
tcagccatcg gacttggaca gaaataagat gaaagacatc ccaaagaggc ctttctctca 1140
gtgtttatct acaattattt ctcctctgtt tgcagagttg aaggagaaga gccaggcgtg 1200
cggagggaac ttggggtcca ttgaagagct gcgaggggcc atctacctag cggaggaggc 1260
gtgccctggc atctccgaca ccatggtggc ccagctcgtg cagcggctcc agagatactc 1320
tettttttte ettetteate etecteettt tttaaaagte aaegagagee ttegetgaet 1440
ccaccgaaga ggtgcgccac tgggagccac cccagtgcca ggcgcccgtc cagggacaca 1500
cacagtette actgtgetge agecagatga agteteteag atgggtgggg agggteaget 1560
ccttccagcg atcattttat tttattttat tacttttgtt tttaatttta accatagtgc 1620
acatattcca ggaaagtgtc tttaaaaaaca aaaacaaacc ctgaaatgta tatttgggat 1680
tatgataagg caactaaaga catgaaacct caggtatect getttaagtt gataactece 1740
tctgggagct ggagaatcgc tctggtggat gggtgtacag atttgtatat aatgtcattt 1800
ttacggaaac cctttcggcg tgcataagga atcactgtgt acaaactggc caagtgcttc 1860
tgtagataac gtcagtggag taaatattcg acaggccata acttgagtct attgccttgc 1920
ctttattaca tgtacatttt gaattctgtg accagtgatt tgggttttat tttgtatttg 1980
cagggtttgt cattaataat taatgcccct ctcttacaga acactcctat ttgtacctca 2040
acaaatgcaa attttccccg tttgccctac gccccttttg gtacacctag aggttgattt 2100
cetttttcat egatggtact atttettagt gttttaaatt ggaacatate ttgcetcatg 2160
aagetttaaa ttataatttt cagtttetee eeatgaageg etetegtetg acatttgttt 2220
ggaatcgtgc cactgctggt ctgcgccaga tgtaccgtcc tttccaatac gattttctgt 2280
tgcaccttgt agtggattct gcatatcatc tttcccacct aaaaatgtct gaatgcttac 2340
acaaataaat tttataacac gcttattttg catactcctt gaaatgtgac tcttcagagg 2400
acagggtacc tgctgtgtat gtgtggccgt gcgtgtgtac tcgtggctgt gtgtgtgtga 2460
tgagacactt tggaagactc cagggagaag ttcccagggc tggagctgcc gagtgcccag 2520
gtcagcgccc tgggctgctt gcgcaatngc tcaccgngat gatgcattgg aggttgctga 2580
cctqtqcqat tqctqtaqcq qttgccaggg accttaaggg gttattttgc ttccctggga 2640
ggggncctat gtttctaggc aagcagccat gtgtctaatt ttctgggttt gctgtgggga 2700
cctgattggg ggaggggaa anctttgggg ttcttggagt gggagggttc gtgccancaa 2760
tnttncctgg taaaaag
<210> 34
<211> 1424
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2594943CB1
<400> 34
```

```
ggctcagcct ccgacccagg tggtctggag cctgccggga gagtggtggc atctgagagg 60
ctggtcgtgg actgtggttg ggggaggtgg gagctgtttt aaccgtgtgc cccctctct 120
gtgccggcgt gggcatcccc cggggcagtg gaacgcgggc gctcctccag cttccgagtc 180
cagecagect gggegeggg egeegeeece gagacacecg aggagteegt teeteeetgg 240
ttacgtggac tgtggagctg gtctcttgtg gctcagcgcc gtgcggaggt tgaagcgtac 300
ctgcggaggt cgcaccaggg cgtgaggagg aggaggaagg gcatgagccg agcttgagga 360
atccgtgctc caaactctac actcaagggt ggcccttggg tagggtgaag atcccctgtc 420
tttateetag tteeacaeet tggtgtgggt taetgggtge aggatgaaet gtegetegga 480
ggtgctggag gtgtcggtgg aggggggca ggtggaggag gccatgctgg ctgtgctgca 540
cacggtgctt ctgcaccgca gcacaggcaa gttccactac aagaaggagg gcacctactc 600
cattggcacc gtgggcaccc aggatgttga ctgtgacttc atcgacttca cttatgtgcg 660
tgtctcttct gaggaactgg atcgtgccct gcgcaaggtt gttggggagt tcaaggatgc 720
actgcgcaac tctggtggcg atgggctggg gcagatgtcc ttggagttct accagaagaa 780
gaagtetege tggecattet cagacgagtg cateccatgg gaagtgtgga cggtcaaggt 840
gcatgtggta gccctggcca cggagcagga gcggcagatc tgccgggaga aggtgggtga 900
gaaactctgc gagaagatca tcaacatcgt ggaggtgatg aatcggcatg agtacttgcc 960
caagatgccc acacagtcgg aggtggataa cgtgtttgac acaggcttgc gggacgtgca 1020
gccctacctg tacaagatct ccttccagat cactgatgcc ctgggcacct cagtcaccac 1080
caccatgege aggeteatea aagacaeeet tgeeetetga gegtegetgg atetetggga 1140
gctccttgat ggctcccaga ccttggcttt tgggaattgc acttttgggc ctttgggctc 1200
tggaacctgc tctgggtcat tggtgagact tggaaggggc agcccccgct ggcttcttgg 1260
ttttgtggtt gccagcctca ggtcatcctt ttaatctttg ctgatggttc agtcctgcct 1320
ctactgicte tecatageee tggtggggte eccettettt etecaetgta cagaagagee 1380
accactggga tggggaataa agttgagaac atgaaaaaaa aaaa
<210> 35
<211> 1839
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 1513871CB1
<400> 35
ceteeteete ggeeagetea ggttgeaget tetetgggga aetgeteaee ttteeggage 60
aggggaaget geeeegtgee egggagggag egggegeace geggeeecea ggaeaegege 120
tgaccegget geccagtece teatgateat gaacaagatg aagaacttta agegeegttt 180
cteectgtea gtgeecegea etgagaceat tgaagaatee ttggetgaat teaeggagea 240
attcaaccag ctccacaacc ggcggaatga gaacttgcag ctcggtcctc ttggcagaga 300
cccccgcag gagtgcagca ccttctcccc aacagacagc ggggaggagc cggggcagct 360
ctcccctggc gtgcagttcc agcggcggca gaaccagcgc cgcttctcca tggaggacgt 420
cagcaagagg ctctctctgc ccatggatat ccgcctgccc caggaattcc tacagaagct 480
acagatggag ageccagate tgcccaagec getcageege atgtecegec gggccteect 540
qtcagacatt ggctttggga aactggaaac atacgtgaaa ctggacaaac tgggagaggg 600
cacctatgcc acagtcttca aagggcgcag caaactgacg gagaaccttg tggccctgaa 660
agagateegg etggageaeg aggaggage geeetgeaet geeateegag aggtgtetet 720
gctgaagaac ctgaagcacg ccaatattgt gacctgcat gacctcatcc acacagatcg 780
gtccctcacc ctggtgtttg agtacctgga cagtgacctg aagcagtatc tggaccactg 840
tgggaacete atgagcatge acaacgteaa gattttcatg ttccagctgc tccggggcet 900
egectactgt caccacegea agatectgea eegggaeetg aageeecaga acctgeteat 960
caacgagagg ggggagctga agctggccga ctttggactg gccagggcca agtcagtgcc 1020
cacaaagact tactccaatg aggtggtgac cctgtggtac aggccccccg atgtgctgct 1080
gggatccaca gagtactcca cccccattga tatgtggggc gtgggctgca tccactacga 1140
qatqqccaca gggaqqcccc tetteccqqq ctccacagtc aaggaggagc tgcacctcat 1200
ctttegeete etegggaeee eeacagaaga gaegtggeee ggegtgaeeg eettetetga 1260
gtteegeace tacagettee eetgetacet eeegeageeg eteateaace aegegeeeag 1320
gttggatacg gatggcatcc acctcctgag cagcctgctc ctgtatgaat ccaagagtcg 1380
catgtcagca gaggetgeee tgagtcacte ctaetteegg tetetgggag agegtgtgea 1440
```

```
ccaqcttqaa qacactgcct ccatcttctc cctgaaggag atccagctcc agaaggaccc 1500
aggetacega ggettggeet tecageagee aggaegaggg aagaacagge ggeagageat 1560
cttctqaqcc acqcccacct tgctgtggcc aagggacaag agatcacatg gagcacaaat 1620
tegggtagga tggageetgt gtggeeeteg gaggaetgaa gaaegaggge tgaeageage 1680
ctggaagacc gcttggcagg cttttggcca agtgttttc tttgtggttt cgatctgctg 1740
ccagtagttt cagtggatac aacgtgcttt aggagttggg tgggaaagtc ttgctagagg 1800
gtttaggggg aggtttctac cgttgactcg gtttagggc
<210> 36
<211> 2024
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 156108CB1
<400> 36
gtcagctctg gttcggagaa gcagcggctg gcgtgggcca tccgggggaat gggcgccctc 60
gtgacctagt gttgcggggc aaaaagggtc ttgccggcct cgctcgtgca ggggcgtatc 120
tgggcgcctg agcgcggcgt gggagccttg ggagccgccg cagcaggggg cacacccgga 180
accggcctga gcgcccggga ccatgaacgg ggaggccatc tgcagcgccc tgcccaccat 240
tecetaceae aaactegeeg acetgegeta eetgageege ggegeetetg geactgtgte 300
gteegeeege caegeagact ggegegteea ggtggeegtg aageaeetge acateeacae 360
tccgctgctc gacagtgaaa gaaaggatgt cttaagagaa gctgaaattt tacacaaagc 420
tagatttagt tacattcttc caattttggg aatttgcaat gagcctgaat ttttgggaat 480
agttactgaa tacatgccaa atggatcatt aaatgaactc ctacatagga aaactgaata 540
teetgatgtt gettggeeat tgagattteg eateetgeat gaaattgeee ttggtgtaaa 600
ttacctgcac aatatgactc ctcctttact tcatcatgac ttgaagactc agaatatctt 660
attggacaat gaatttcatg ttaagattgc agattttggt ttatcaaagt ggcgcatgat 720
gtccctctca cagtcacgaa gtagcaaatc tgcaccagaa ggagggacaa ttatctatat 780
gccacctgaa aactatgaac ctggacaaaa atcaagggcc agtatcaagc acgatatata 840
tagetatgea gttateaeat gggaagtgtt atecagaaaa cageettttg aagatgteae 900
caatcetttg cagataatgt atagtgtgtc acaaggacat cgacctgtta ttaatgaaga 960
aagtttgcca tatgatatac ctcaccgagc acgtatgatc tctctaatag aaagtggatg 1020
ggcacaaaat ccagatgaaa gaccatcttt cttaaaatgt ttaatagaac ttgaaccagt 1080
tttgagaaca tttgaagaga taacttttct tgaagctgtt attcagctaa agaaaacaaa 1140
gttacagagt gtttcaagtg ccattcacct atgtgacaag aagaaaatgg aattatctct 1200
gaacatacct gtaaatcatg gtccacaaga ggaatcatgt ggatcctctc agctccatga 1260
aaatagtggt teteetgaaa etteaaggte eetgeeaget eeteaagaea atgatttttt 1320
atctagaaaa gctcaagact gttattttat gaagctgcat cactgtcctg gaaatcacag 1380
ttgggatage accatttctg gateteaaag ggetgeatte tgtgateaea agaceaetee 1440
atgetettea geaataataa ateeactete aactgeagga aacteagaac gtetgeagee 1500
tggtatagec cagcagtgga tecagageaa aagggaagac attgtgaacc aaatgacaga 1560
agectgeett aaccagtege tagatgeeet tetgteeagg gaettgatea tgaaagagga 1620
ctatgaactt gttagtacca agcctacaag gacctcaaaa gtcagacaat tactagacac 1680
tactgacatc caaggagaag aatttgccaa agttatagta caaaaattga aagataacaa 1740
acaaatgggt etteageett acceggaaat acttgtggtt tetagateae catetttaaa 1800
tttacttcaa aataaaagca tgtaagtgac tgtttttcaa gaagaaatgt gtttcataaa 1860
aggatattta tatctctgtt gctttgactt tttttatata aaatccgtga gtattaaagc 1920
tttattgaag gttctttggg taaatattag tctccctcca tgacactgca gtatttttt 1980
taattaatac aagtaaaaag tttgaatttt gctacataaa aaaa
                                                                   2024
<210> 37
<211> 1861
<212> DNA
<213> Homo sapiens
<220>
```

<221> misc_feature

```
<223> Incyte ID No: 2883243CB1
<400> 37
gcttcttagt gaggttggca ttatgttaag gctggtatgg aagacaactg atgaagcagg 60
agtggtctgg tgacattttt ctgacttgat tggctggggc gtgtgatgta ataggtttca 120
gtgcagcccc ttataggttt taaaatgaat tccaagacac cattacaaag aaagccggac 180
tettttetta taaetgaget eageeaagga aaetettgea eaaatgtaea ataetgtttg 240
gaatatggaa gacctggatt tagaatatgc caagacagat ataaattgtg gcacagactt 300
gatgttttat atagaaatgg acccaccagc actgcctcct aaaccaccaa aacctactac 360
tgtagccaac aacggtatga ataacaatat gtccttacaa gatgctgaat ggtactgggg 420
agatateteg agggaagaag tgaatgaaaa acttegagat acageagaeg ggacettttt 480
qqtacqaqat qcqtctacta aaatgcatgg tgattatact cttacactaa ggaaaggggg 540
aaataacaaa ttaatcaaaa tatttcatcg agatgggaaa tatggcttct ctgacccatt 600
aaccttcagt tctgtggttg aattaataaa ccactaccgg aatgaatctc tagctcagta 660
taateecaaa ttggatgtga aattaettta teeagtatee aaataecaae aggateaagt 720
tgtcaaagaa gataatattg aagctgtagg gaaaaaatta catgaatata acactcagtt 780
tcaaqaaaaa aqtcqaqaat atgatagatt atatgaaqaa tatacccqca catcccagga 840
aatccaaatg aaaaggacag ctattgaagc atttaatgaa accataaaaa tatttgaaga 900
acagtgccag acccaagagc ggtacagcaa agaatacata gaaaagttta aacgtgaagg 960
caatgagaaa gaaatacaaa ggattatgca taattatgat aagttgaagt ctcgaatcag 1020
tgaaattatt gacagtagaa gaagattgga agaagacttg aagaagcagg cagctgagta 1080
tcqaqaaatt gacaaacgta tgaacagcat taaaccagac cttatccagc tgagaaagac 1140
gagagaccaa tacttgatgt ggttgactca aaaaggtgtt cggcaaaaga agttgaacga 1200
gtggttgggc aatgaaaaca ctgaagacca atattcactg gtggaagatg atgaagattt 1260
gccccatcat gatgagaaga catggaatgt tggaagcagc aaccgaaaca aagctgaaaa 1320
cctgttgcga gggaagcgag atggcacttt tcttgtccgg gagagcagta aacagggctg 1380
ctatgcctgc tctgtagtgg tggacggcga agtaaagcat tgtgtcataa acaaaacagc 1440
aactggctat ggctttgccg agccctataa cttgtacagc tctctgaaag aactggtgct 1500
acattaccaa cacacctccc ttgtgcagca caacgactcc ctcaatgtca cactagccta 1560
cccagtatat gcacagcaga ggcgatgaag cgcttactct ttgatccttc tcctgaagtt 1620
cagccaccct gaggcctctg gaaagcaaag ggctcctctc cagtctgatc tgtgaattga 1680
gctgcagaaa cgaagccaac tttttttgga tgggactagt gctttctttc acaaaaaaaga 1740
agtaggggaa qacatgcagc ctaaggctgt atgatgacca cacgttccta agctggagtg 1800
1861
<210> 38
<211> 2045
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 3173355CB1
<400> 38
cttggctgga acctgagacg gattcgctcc caaatgatgc tccagtggca ggagcaactc 60
aagttcatca ttgtcctgag agagaggagc agcgcggttc tcggccggga cagcagaacg 120
ccaggggacc ctcacctggg cgcgccgggg cacgggcttt gattgtcctg gggtcgcgga 180
gaccegegeg cetgecetge acgeegggeg geaacetttg cagtegegtt ggetgetgeg 240
ateggeegge gggteeetge egaaggeteg getgettetg teeacetett acaettette 300
atttateggt ggateattte gagagteegt ettgtaaatg tttggcaett tgetaettta 360
ttgettettt etggegaeag tteeageact egeegagaec ggeggagaaa ggeagetgag 420
cccggagaag agcgaaatat ggggacccgg gctaaaagca qacqtcqtcc ttcccgcccg 480
ctatttctat attcaggcag tggatacatc agggaataaa ttcacatctt ctccaggcga 540
aaaggtcttc caggtgaaag tctcagcacc agaggagcaa ttcactagag ttggagtcca 600
ggttttagac cgaaaagatg ggtccttcat agtaagatac agaatgtatg caagctacaa 660
aaatetgaag gtggaaatta aatteeaagg geaacatgtg geeaaateee catatatttt 720
```

<212> DNA

```
aaaagggccg gtttaccatg agaactgtga ctgtcctctg caagatagtg cagcctggct 780
acgggagatg aactgccctg aaaccattgc tcagattcag agagatctgg cacatttccc 840
tgctgtggat ccagaaaaga ttgcagtaga aatcccaaaa agatttggac agaggcagag 900
cctatgtcac tacaccttaa aggataacaa ggtttatatc aagactcatg gtgaacatgt 960
aggttttaga attttcatgg atgccatact actttctttg actagaaagg tgaagatgcc 1020
agatgtggag ctctttgtta atttgggaga ctggcctttg gaaaaaaaga aatccaattc 1080
aaacatccat ccgatctttt cctggtgtgg ctccacagat tccaaggata tcgtgatgcc 1140
tacgtacgat ttgactgatt ctgttctgga aaccatgggc cgggtaagtc tggatatgat 1200
qtccqtqcaa gctaacacgg gtcctccctg ggaaagcaaa aattccactg ccqtctggag 1260
agggcgagac agccgcaaag agagactcga gctggttaaa ctcagtagaa aacacccaga 1320
actcatagac gctgctttca ccaacttttt cttctttaaa cacgatgaaa acctgtatgg 1380
tcccattgtg aaacatattt cattttttga tttcttcaag cataagtatc aaataaatat 1440
cgatggcact gtagcagctt atcgcctgcc atatttgcta gttggtgaca gtgttgtgct 1500
qaaqcaqqat tccatctact atqaacattt ttacaatqaq ctqcaqccct qqaaacacta 1560
cattccagtt aagagcaacc tgagcgatct gctagaaaaa cttaaatggg cgaaagatca 1620
cgatgaagag gccaaaaaga tagcaaaagc aggacaagaa tttgcaagaa ataatctcat 1680
gggcgatgac atattctgtt attatttcaa acttttccag gaatatgcca atttacaagt 1740
gagtgagccc caaatccgag agggcatgaa aagggtagaa ccacagactg aggacgacct 1800
cttcccttgt acttgccata ggaaaaagac caaagatgaa ctctgatatg caaaataact 1860
totattagaa taatggtgot otgaagacto ttottaacta aaaagaagaa tttttttaag 1920
tattaattcc atggacaata taaaatctgt gtgattgttt gcagtatgaa gacacatttc 1980
tacttatgca gtattctcat gactgtactt taaagtacat ttttagaatt ttataataaa 2040
accac.
<210> 39
<211> 1260
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 5116906CB1
<400> 39
cgatattttt ctttcttagt ttcccatttc atattgtttt gtcaaatcaa ctgtgactca 60
ttaacatctc ttttccctag gttttgctgg cacacctgga tatctttctc cagaagtttt 120
acgtaaagat ccttatggaa agccagtgga tatgtgggca tgtggtgtca ttctctatat 180
tetaettgtg gggtatecae cettetggga tgaagaceaa caeagaetet ateageagat 240
caaggetgga gettatgatt tteeateace agaatgggae aeggtgaete etgaageeaa 300
agaceteate aataaaatge ttaetateaa eeetgeeaaa egeateaeag eeteagagge 360
actgaagcac ccatggatct gtcaacgttc tactgttgct tccatgatgc acagacagga 420
gactgtagac tgcttgaaga aatttaatgc tagaagaaaa ctaaagggtg ccatcttgac 480
aactatgctg gctacaagga atttctcagc agccaagagt ttgttgaaga aaccagatgg 540
aqtaaaqqag tcaactgaga gttcaaatac aacaattgag gatgaagatg tgaaagcacg 600
aaagcaagag attatcaaag tcactgaaca actgatcgaa gctatcaaca atggggactt 660
tgaagcctac acaaaaatct gtgacccagg ccttactgct tttgaacctg aagctttggg 720
taatttagtg gaagggatgg attttcaccg attctacttt gaaaatgctt tgtccaaaag 780
caataaacca atccacacta ttattctaaa ccctcatgta catctggtag gggatgatgc 840
cgcctgcata gcatatatta ggctcacaca gtacatggat ggcagtggaa tgccaaagac 900
aatgcagtca gaagagactc gtgtgtggca ccgccgggat ggaaagtggc agaatgttca 960
ttttcatcgc tcggggtcac caacagtacc catcaactaa atttcaacag tgccacttct 1020
geattetetg tteteaagge acctggatgg tgaccetggg cegteetete etectettea 1080
tgcatgtttc tgagtgcatg aagttgtgaa ggtcctacat gtaatgcata tgtgatgcat 1140
catcttatca tatattcctt cctatacatt gtttacactt caactacggg gatgttccac 1200
<210> 40
<211> 2059
```

```
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 940589CB1
<400> 40
aaaccataga aacgctaatg aaagcagaca tcaaaatctg gatccttaca ggggacaagc 60
aagaaactgc cattaacatc ggacactcct gcaaactgtt gaagaagaac atgggaatga 120
ttgttataaa tgaaggctct cttgattctt tctctaatac acagaattct aggaaggagg 180
ctgttctttt agccaaaatg aaacacccta atattgttgc cttcaaagaa tcatttgaag 240
ctgaaggaca cttgtatatt gtgatggaat actgtgatgg aggggatcta atgcaaaaga 300
ttaaacagca gaaaggaaag ttatttcctg aagacatgat acttaattgg tttacccaaa 360
tgtgccttgg agtaaatcac attcacaaga aacgtgtgct acacagagat atcaagtcca 420
agaatatett eeteaeteag aatggaaaag tgaaattggg agaetttgga tetgeeegte 480
ttctctccaa tccgatggca tttgcttgta cctatgtggg aactccttat tatgtgcctc 540
cagaaatttg ggaaaacctg ccttataaca ataaaagtga catctggtcc ttgggttgca 600
teetgtatga aetetgtace ettaageate eattteagge aaatagttgg aaaaatetta 660
tcctcaaagt atgtcaaggg tgcatcagtc cactgccgtc tcattactcc tatgaacttc 720
agttectagt caageagatg tttaaaaagga ateeeteaca tegeeeeteg getacaaege 780
ttctctctcg aggcatcgta gctcggcttg tccagaagtg cttacccccc gagatcatca 840
tggaatatgg tgaggaagta ttagaagaaa taaaaaattc gaagcataac acaccaagaa 900
aaaaaacaaa ccccagcaga atcaggatag ctttgggaaa tgaagcaagc acagtgcaag 960
aggaagaaca agatagaaag ggtagccata ctgatttgga aagcattaat gaaaatttag 1020
ttgaaagtgc attgagaaga gtaaacagag aagaaaaagg taataagtca gtccatctga 1080
ggaaagccag ttcaccaaat cttcatagac gacagtggga gaaaaatgta cccaatacag 1140
ctcttacage tttggaaaat gcatecatae teaceteeag tttaacagea gaggaegata 1200
gaggtggttc tgtaataaag tacagcaaaa atactactcg taagcagtgg ctcaaagaga 1260
ccccggacac tttgttgaac atccttaaga atgctgatct cagcttggct tttcaaacat 1320
acacaatata tagaccaggt tcagaagggt tcttgaaagg ccccctgtct gaagaaacag 1380
aagcatcgga cagtgttgat ggaggtcacg attctgtcat ttttggatcca gagcgacttg 1440
agectggget agatgaggag gacaeggaet ttgaggagga agatgacaac ceegaetggg 1500
tgtcagagct gaagaagcga gctggatggc aaggcctgtg cgacagataa tgcctgagga 1560
aatgttcctg agtcacgctg aggagagcct tcactcagga gttcatgctg agatgatcat 1620
gagttcatgc gacgtatatt ttcctttgga aacagaatga agcagaggaa actcttaata 1680
cttaaaatcg ttcttgatta gtatcgtgag tttgaaaagt ctagaactcc tgtaagtttt 1740
tgaactcaag ggagaaggta tagtggaatg agtgtgagca tcgggctttg cagtcccata 1800
gaacagaaat gggatgctag cgtgccacta cctacttgtg tgattgtggg aaattactta 1860
acctetteaa geeceaattt eeteaaceat aaaatgaaga taataatgee taeeteagag 1920
ggatgetgae cacagacett tatageagee egtatgatat tatteacatt atgatatgtg 1980
tttattatta tgtgactctt tttacatttc ctaaaggttt gagaattaaa tatatttaat 2040
                                                                  2059
tatgaaaaaa aaaaaaaaa
<210> 41
<211> 1023
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 304421CB1
<400> 41 ·
qaqqcaqaqq qqtqqqqqqq ctqqcccatq qctqaqacct ctctcccaqa qctqqqqqqa 60
gaggacaaag ccacgccttg ccccagcatc ctggagctgg aggagctcct gcgggcaggg 120
aagtettett geageegtgt ggaegaagtt tggeecaace tttteatagg agatgegatg 180
gactcactgc agaagcagga cctccggagg cccaagatcc atggggcagt ccaggcatct 240
ccctaccage egeceacatt ggettegetg eagegettge tgtgggteeg teaggetgee 300
acactgaacc atategatga ggtetggeee ageetettee tgggagatge gtaegeagee 360
```

```
cqqqacaaqa qcaaqctqat ccaqctqqqa atcacccacg ttqtgaatqc cgctgcaggc 420
aaqttccaqq tqqacacaqq tqccaaattc taccgtggaa tgtccctgga gtactatggc 480
atcgaggcgg atgacaaccc cttcttcgac ctcagtgtct actttctgcc tgttgctcga 540
tacatccgag ctgccctcag tgttccccaa ggccgcgtgc tggtacactg tgccatgggg 600
gtaageeget etgeeacaet tgteetggee tteeteatga tetatgagaa catgaegetg 660
gtagaggcca tccagacggt gcaggcccac cgcaatatct gccctaactc aggcttcctc 720
eggeagetee aggttetgga caacegactg gggegggaga egggeggtt etgatetgge 780
aggeageeag gateeetgae eettggeeea acceeaceag eetggeeetg ggaacageag 840
gctctgctgt ttctagtgac cctgagatgt aaacagcaag tgggggctga ggcagaggca 900
gggatagetg ggtggtgace tettageggg tggattteee tgacceaatt cagagattet 960
ttatgcaaaa gtgagttcag tccatctcta taataaaata ttcatcgtca taaaaaaaaa 1020
                                                                  1023
<210> 42
<211> 4416
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 1213802CB1
<400> 42
gaaatttttt tetgeeteat tattattaat teatggattg agtgttggtt egacetaeag 60
gcgtaataga ttggaactca gtgaagacac agatgttcct gttcagagca accagctaat 120
gattacagtt taaagacaat ttctgtgatc aagttgtcat ttggaagatt aaacccattt 180
cacgaggact tggagcctgg tccttgcttt gaggaagcag tggcttgttt caagaagcca 240
cttctgatct aagaatctac ccagcatgcc taatcaagga gaagactgct atttttttt 300
ctattccaca tgtaccaaag gcgacagctg cccattccgt cactgtgaag ctgcaatagg 360
aaatgaaact gtttgcacat tatggcaaga agggcgctgt tttcgacagg tgtgcaggtt 420
teggeacatg gagattgata aaaaacgeag tgaaatteet tgttattggg aaaateagee 480
aacaggatgt caaaaattaa actgcgcttt ccatcacaat agaggacgat atgttgatgg 540
ccttttccta cctccqaqca aaactqtqtt qcccactqtq cctqaqtcac cagaagagga 600
agtgaagget agecaacttt cagttcagca gaacaaattg tetgtecagt ccaatcette 660
ccctcagctg cggagcgtta tgaaagtaga aagttccgaa aatgttccta gccccacgca 720
tccaccagtt gtaattaatg ctgcagatga tgatgaagat gatgatgatc agttttctga 780
ggaaggtgat gaaaccaaaa cacctaccct gcaaccaact cctgaagttc acaatggatt 840
acgagtgact tetgteegga aacetgeagt caatataaag caaggtgaat gtttgaattt 900
tggaataaaa actcttgagg aaattaagtc aaagaaaatg aaggaaaaat ctaagaagca 960
aggtgagggt tettcaggag tttccagtet tttactccac cetgageceg ttccaggtec 1020
tgaaaaagaa aatgtcagga ctgtggtgag gacagtaact ctctccacca aacaaggaga 1080
agaacccttg gttagattga gtcttactga gagactgggg aaacgaaaat tttcagcagg 1140
cggtgacagt gatcetecat taaagcgtag cetggcacag aggetaggga agaaagttga 1200
agetecagaa actaacattq acaaaacacc aaaqaaaget caagttteca agtetettaa 1260
ggagcgatta ggcatgtcag ctgatccaga taatgaggat gcaacagata aagttaataa 1320
agttggtgag atccatgtga agacattaga agaaattctt cttgaaaagag ccagtcagaa 1380
acgtggagaa ttgcaaacta aactcaagac agaaggacct tcaaaaaactg atgattctac 1440
ttcaggagca agaagctcct ccactatccg tatcaaaacc ttctctgagg tcctggctga 1500
aaaaaaaacat cqqcaqcagg aaqcagaqag acaaaaaagc aaaaaggata caacttgcat 1560
caagctaaag attgatagtg aaattaaaaa aacagtagtt ttgccaccca ttgttgccag 1620
cagaggacaa tcagaggagc ctgcaggtaa aacaaagtct atgcaggagg tgcacatcaa 1680
gacgetggaa gaaattaaac tggagaagge actgagggtg cagcagaget ctgagagcag 1740
caccagetee cegteteaac aegaggeeac teeaggggea aggeggetge tgegaateac 1800
caaaagaaca gggatgaaag aagagaagaa ccttcaggaa ggaaatgaag ttgattctca 1860
gagcagtatt agaacagaag ctaaagaggc ttcaggtgag accacaggag ttgacatcac 1920
taaaattcaa gtcaagagat gtgagaccat gagagagaag cacatgcaga aacagcagga 1980
gagggaaaaa tcagtcttga cacctcttcg gggagatgta gcctcttgca atacccaagt 2040
ggcagagaaa ccagtgctca ctgctgtgcc aggaatcaca cggcacctga ccaagcggct 2100
tcccacaaag tcatcccaga aggtggaggt agaaacctca gggattggag actcattatt 2160
```

```
gaatgtgaaa tgtgcagcac agaccttgga aaaaaggggt aaagctaaac ccaaagtgaa 2220
cgtgaageca tetgtggtta aagttgtgte ateceecaaa ttggeeceaa aaegtaagge 2280
agtggagatg cacgetgetg teattgeege tgtgaageea eteageteea geagtgteet 2340
acaggaaccc ccagccaaaa aggcagctgt ggctgttgtc ccgcttgtct ctgaggacaa 2400
atcagtcact gtgcctgaag cagaaaatcc tagagacagt cttgtgctgc ctccaaccca 2460
gteetettea gatteeteae eeceggaggt gtetggeeet teeteateee aaatgageat 2520
gaaaactege egacteaget etgeeteaac aggaaageee eeactetetg tggaggatga 2580
ttttgagaaa ctaatatggg agatttcagg aggcaaattg gaagctgaga ttgacctgga 2640
teetgggaaa gatgaagatg acettetget tgagetatea gaaatgattg atagetgaag 2700
gtggtagtga ggacacttta aaaaaaaaat cgccaaaaaa ctggacttag tttcatctat 2760
tgtaacattt acctgagatg atcatttett tagtetagaa tttgeeceaa atcagaagta 2820
tacctctgaa ttatctgtat gtgtcctgga ttccttgggg tcagattttt aaagttactt 2880
tataaccatt ttgtccattt gatgccattg tttatcatct tttgagaaaa aagttctgtc 2940
ataccettet etecacaaaa aagagactga gaqqqaqate aagtgaaaqq gtgcaagega 3000
acttagtgac teettgaggt gtttgteagt tttggttttt ttettetttg ttgtattett 3060
tatgtattgt cttgatgtac ttaatattac ctgagtttga aatggatgaa gacagctgct 3120
accattaagg accaaatttt atgetaccac taaacaaaaa tacccactca gtctgtgtta 3180
aattgtatgt ctttttaaag gtatttaaag attcaactaa gctttaaaga gggctgagca 3240
gctcaggaag cctgtaatgt gggcataact ctttggacct gatcttgatg cttctgctgc 3300
totgttagcc totgaagagc aatatotaat ttattattac tgtaattttt taaaaggctt 3360
taaagtgcct caggggtccc ctgaaactaa ttttctattt ctgggattcc ctggattcat 3420
tatatgagat ggtgacatga ttagaggaat tcttttttag tatgaaaatt gtcccttttc 3480
ttetteagta ettgeeteet tgetggeatt gaattaacae agggacaaaa tttggttaat 3540
tttttatttc taactctccc aacaaacccc tgttgcccag tatttgtttg gtggccttta 3600
accacctgag ggaaaaaatg agcttattca agctgccaat atttatctat gggctgtagc 3660
agtacactga attgtactgt gccagggata ttgagatgct ctgggggtgt attgtatacc 3720
cacctcaagg tttagatttg tgaaggaata agcatgatgg aaataatagt cttgaaagga 3840
gatatgttgt atataatcag gaggaagagg aaggaaggac ttacccattt tgatattttg 3900
ctgtaggtgg ccagttttgt ttctcatagg gaaatctgac ccacctgtca tgttggctcc 3960
taaggaactg ctgttgtaag cggctcatca agagttgaac ttcacgtagc cttgttggga 4020
atatggaaaa ggaagaaagc cacaggactg cccattcagt cttgggaaga ttgggatgat 4080
tetgeacaag caaaaatgae tgaagtttat gtatagaeac acetetaeca atecatette 4140
agctgactga atgttgtatg atagcccttc tccaaagcag aggtagaatg ttcaggtttc 4200
accatggatt ttctacttat ttcgtttttg gaatcagett acagattcca ggtccctttt 4260
gtatatattc tttattcttt tgctttttta aaaaataatt ttgtttcata tttaaagcac 4320
ttgtattagt caatgtttcg tgttccgcat tatttgaacc atttgccctt acagaaagag 4380
aaatacttgt ttgtgtttta aataaaactg atgtag
                                                                 4416
<210> 43
<211> 2068
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 1378134CB1
<400> 43
gcagtccatc agtccgctga tgcgtcgccg ggccagcaac gctgccgccg cagcccacac 60
gattggcggc agtaagcaca caatgaatga tcacctgcat gtcggcagcc acgctcacgg 120
acagatccag gttcgacagt tgtttgagga taacagtaac aagcggacag tgctcacgac 180
acaaccaaat gggcttacaa cagtgggcaa aacgggcttg ccagtggtgc cagagcggca 240
gctggacagc attcatagac ggcaggggag ctccacctct ctaaagtcca tggaaggcat 300
ggggaaggtg aaagccaccc ccatgacacc tgaacaagca atgaagcaat acatgcaaaa 360
acteacagee ttegaacace atgagatttt cagetaceet gaaatatatt tettgggtet 420
aaatgctaag aagcgccagg gcatgacagg tgggcccaac aatggtggct atgatgatga 480
ccagggatca tatgtgcagg tgccccacga tcacgtggct tacaggtatg aggtcctcaa 540
ggtcattggg aaggggaget ttgggcaggt ggtcaaggcc tacgatcaca aagtccacca 600
```

```
gcacgtggcc ctaaagatgg tgcggaatga gaagcgcttc caccggcaag cagcggagga 660
gateegaate etggaacace tgeggaagea ggacaaggat aacacaatga atgteateea 720
tatgctggaq aatttcacct tccgcaacca catctgcatg acgtttgagc tgctgagcat 780
gaacctctat gagetcatca agaagaataa atteeaggge tteagtetge etttggtteg 840
caagtttgcc cactcgattc tgcagtgctt ggatgctttg cacaaaaaca gaataattca 900
ctgtgacctt aagcccgaga acattttgtt aaagcagcag ggtagaagcg gtattaaagt 960
aattgatttt ggctccagtt gttacgagca tcagcgtgtc tacacgtaca tccagtcgcg 1020
tttttaccgg gctccagaag tgatccttgg ggccaggtat ggcatgccca ttgatatgtg 1080
gagectggge tgcattttag cagageteet gaegggttae cecetettge etggggaaga 1140
tgaaggggac cagctggcct gtatgattga actgttgggc atgccctcac agaaactgct 1200
ggatgcatcc aaacgagcca aaaattttgt gagctccaag ggttatcccc gttactgcac 1260
tgtcacgact ctctcagatg gctctgtggt cctaaacgga ggccgttccc ggagggggaa 1320
actgaggggc ccaccggaga gcagagagtg ggggaacgcg ctgaaggggt gtgatgatcc 1380
cetttteett gaettettaa aacagtgttt agagtgggat cetgeagtge geatgacece 1440
aggecagget ttgeggeace cetggetgag gaggeggttg ccaaageete ccaeegggga 1500
gaaaacgtca gtgaaaagga taactgagag caccggtgct atcacatcta tatccaagtt 1560
acctccacct tctagctcag cttccaaact gaggactaat ttggcgcaga tgacagatgc 1620
caatgggaat attcagcaga ggacagtgtt gccaaaactt gttagctgag ctcacgtccc 1680
ctgatgctgg taacctgaaa gatacgacat tgctgagcct tactgggttg aaaaggagta 1740
gctcagacct gtttttattt gctcaataac tctactcatt tgtatctttt cagcacttaa 1800
ttttaatgta agaaagttgt tcattttgtt tttataaaat acatgaggac aatgctttaa 1860
gtttttatac tttcagaaac tttttgtgtt ctaaaagtac aatgagcctt actgtattta 1920
gtgtggcaga ataataacat cagtggcagg ccactgatta cttcatgact gccacgcatt 1980
tacagattgg tgtcaaagac attcactatg tttttatggt tcatgttata tcctccccag 2040
ggtgacagcc ccttaaggcc ctcctttt
                                                                2068
<210> 44
<211> 1850
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 1490070CB1
<400> 44
actggccact gcctcccacc cagggctggc atccctgctc cctgccctgg gtcccagact 120
atcactgage tecacteett ceteattttg etgetgatte tageeccaaa caaaacaggt 240
tgagettttt ceteceetca gaageteete tetggetegt ggetgeette tgagtgttge 300
agacggcgcc ggccgggaag gggggcctgg gccagccctg ccaggactgg gacgctgctg 360
ctggegectg geeeteeate aggeeagect gtggeaggag agtgagettt geegeggeag 420
acgeetgagg atgatgeece agetgeagtt caaagatgee ttttggtgea gggaetteae 480
ageceaeaeg ggetaegagg tgetgetgea geggettetg gatggeagga agatgtgeaa 540
agacatggtg gagctactgt ggcagagggc ccaggcggag gagcggtacg ggaaggagct 600
ggtgcagatc gcacggaagg caggtggcca gacggagatc aactccctga gggcctcctt 660
tgacteettg aagcagcaaa tggagaatgt gggcagetca cacatecage tggceetgae 720
cctgcgtgag gagctgcgga gtctcgagga gtttcgtgag aggcagaagg agcagaggaa 780
gaagtatgag gccgtcatgg accgggtcca gaagagcaag ctgtcgctct acaagaaggc 840
catggagtcc aagaagacat acgagcagaa gtgccgggac gcggacgacg cggagcaggc 900
cttcgagcgc attagcgcca acggccacca gaagcaggtg gagaagagtc agaacaaagc 960
caggeagtge aaggactegg ceaeegagge agagegggta taeaggeaga geattgegea 1020
gctggagaag gtccgggctg agtgggagca ggagcaccgg accacctgtg aggcctttca 1080
getgeaagag tttgacegge tgaceattet cegeaacgee etgtgggtge acageaacea 1140
getetecatg cagtgtgtca aggatgatga getetacgag gaagtgegge tgacgetgga 1200
aggetgeage atagaegeeg acategaeag ttteateeag geeaagagea egggeaeaga 1260
gccccccgct ccggtgccct accagaacta ttacgatcgg gaggtcaccc cgctgaccag 1320
cagecetgge atacageegt cetgeggeat gataaagagg ttetetggae tgetgeaegg 1380
```

```
aagtcccaag accaettegt tggcagette tgetgegtee acagagaece tgaceccae 1440
ccccgagcgg aatgagggtg tctacacagc catcgcagtg caggagatac agggaaaccc 1500
ggcctcacca gcccaggagt accgggcgct ctacgattat acagcgcaga acccagatga 1560
gctggacctg tccgcgggag acatcctgga ggtgatcctg gaaggggagg atggctggtg 1620
gactgtggag aggaacgggc agcgtggctt cgtccctggt tcctacctgg agaagctttg 1680
aggaagggcc aggagcccct teggacetge cetgeeagtg gageeageag tgeeeceage 1740
actgtcccca ccttgctagg gcccagaacc aagcgtcccc cagccccgag agggagcctg 1800
1850
<210> 45
<211> 2534
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 1997814CB1
<400> 45
gaagagggga tggagcaggg gctggaggag gaagaagagg tggatccccg gatccaggga 60
gaactggaga agttaaatca gtccacggat gatatcaaca gacgggagac tgaacttgag 120
gatgetegte agaagtteeg etetgttetg gttgaagcaa eggtgaaaet ggatgaaetg 180
gtgaagaaaa ttggcaaagc tgtggaagac tccaagccct actgggaggc acggagggtg 240
gcgaggcagg ctcagctgga agctcagaaa gccacgcagg acttccagag ggccacagag 300
gtgctccgtg ccgccaagga gaccatctcc ctggccgagc agcggctgct ggaggatgac 360
aageggeagt tegacteege etggeaggag atgetgaate aegeeactea gagggteatg 420
gaggeggage agaceaagae caggagegag etggtgeata aggagaegge ageeaggtae 480
aatgeegeea tgggeegeat gegacagetg gagaagaaac tcaagagage catcaacaag 540
tccaagcctt attttgaact caaggcaaag tactatgtgc agetcgagca actgaaaaag 600
actgtggatg acctgcaggc caaactgacc ctggcaaaag gcgagtacaa gatggccctg 660
aagaacctgg agatgatete agatgagate caegagegge ggegeteeag tgecatgggg 720
cctcggggat gcggtgttgg tgctgagggc agcagcacat ctgtggagga tctgccaggg 780
agcaaacctg agcctgatgc catttctgtg gcctcggagg cctttgaaga tgacagctgt 840
agcaactttg tgtctgaaga tgactcggaa acccagtccg tgtccagctt tagttcagga 900
ccaacaagcc cgtctgagat gcctgaccag ttccctgcgg ttgtgaggcc tggcagcctg 960
gatetgeeca geeetgtgte eetgteagag tttgggatga tgtteecagt gttgggeeet 1020
cgaagtgaat gcagcggggc ctcctcccct gaatgtgaag tagaacgagg agacagggca 1080
gaaggggcag agaataaaac aagtgacaaa gccaacaaca accggggcct cagcagtagc 1140
agtggcagtg gtggcagcag taagagccaa agcagcacct cccctgaggg ccaggccttg 1200
gagaaccgga tgaagcagct ctccctacag tgctcaaagg gaagagatgg aattattgct 1260
gacataaaaa tggtgcagat tggctgattc atcctgggcc ctggccgatg tgcatatcaa 1320
catttataca tggaactgga gaacattgtg ccaataatca tttaatatat gccaaatctt 1380
acacqtctac tctaaactgc tctaatqaaq tttcaqtqac cttqaqqqct aaaqattqtt 1440
cttctgggta agagetettg ggetggtttt teagageaga gttettgttg tgggtagaet 1500
gtgactaggt tcacagcctt tgtggaacat tccgtataac ggcattgtgg aagcaataac 1560
tagttcctat gaaagaacca gagctgggaa gatggctggg aagccaggcc aaagtggggg 1620
caacagettg ettetette tetteteace etcagtttgt atgggaaaat ggagatgtee 1680
tctccacttt atcccacgat atctaaatga aaaagaaaga aaacccacac acaaagcaaa 1740
aactcaagta ttaagagcac atatttttga cccagtggag gcttaaaaaa aaaaaaatcc 1800
aagaacacaa ttcattttca ccacctctgg tgttcagagg gggcttttaa aaaagcgtgt 1860
atgctgggat acccattaaa accattttct agaaggctac catgagctgc actttttggg 1920
gtgggaaagg tgaatgccag tggggatgcg gggggatgag ggtaggaggg acttatagaa 1980
ggggatttgt ggctgtgggg gagaaggttc tacagcataa gccttatcct gccagccaag 2040
gggatttatt ctaagagaag tgcatgtgaa gaatggttgc cactgttatt agattgacaa 2100
gatgttaatt tctctgtagg ttgtaacttt aaaaataaat gaaattattt aagggttatg 2160
ctgcactagt attccttaga ggaaacagtt ctttaaagtt aggaaaggga gtaggcaggc 2220
atgtgttggc aaaggctgtt aatagtagtt aagtgttaag actgcttttc tttaacgttt 2280
tcatggtaat gcatatttag agcactgtat ttttgtcttg ttaagaaaat ttagcatttc 2340
taaaagaaaa aagcaaccct ctttcaaact gttaattctg tcacagcctg tatattttag 2400
```

```
tcatttgtaa atctcttcat acaatagtga cttctttttt gactgataca gtatcttaat 2460
tacaaggtta ttttgtactt gtcttaatac actaagtgta ataaaaacgg cttgagaaaa 2520
qttaaaaaaa aaaa
<210> 46
<211> 3786
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2299715CB1
<400> 46
cegtectega ggegaggaga gtacegggee ggeeeggetg eegegegagg agegeggteg 60
geggeetggt etgeggetga gatacacaga gegacagaga catttattgt tatttgtttt 120
ttggtggcaa aaagggaaaa tggcgaacga ctcccctgca aaaagtctgg tggacatcga 180
ceteteetee etgegggate etgetgggat tttttgagetg gtggaagtgg ttggaaatgg 240
cacctatgga caagtctata agggtcgaca tgttaaaacg ggtcagttgg cagccatcaa 300
agttatggat gtcactgagg atgaagagga agaaatcaaa ctggagataa atatgctaaa 360
gaaatactct catcacagaa acattgcaac atattatggt gctttcatca aaaagagccc 420
tecaggacat gatgaceaac tetggettgt tatggagtte tgtggggetg ggtecattae 480
agacettgtg aagaacaca aagggaacac actcaaagaa gactggateg ettacatete 540
cagagaaatc ctgaggggac tggcacatct tcacattcat catgtgattc accgggatat 600
caagggccag aatgtgttgc tgactgagaa tgcaggggtg aaacttgttg actttggtgt 660
gagtgctcag ctggacagga ctgtggggcg gagaaatacg ttcataggca ctccctactg 720
gatggctcct gaggtcatcg cctgtgatga gaacccagat gccacctatg attacagaag 780
tgatetttgg tettgtggea ttacagecat tgagatggea gaaggtgete eeeetetetg 840
tgacatgcat ccaatgagag cactgtttct cattcccaga aaccctcctc cccggctgaa 900
gtcaaaaaaa tggtcgaaga agttttttag ttttatagaa gggtgcctgg tgaagaatta 960
catgcagegg ecetetaeag ageagetttt gaaacateet tttataaggg ateageeaaa 1020
tgaaaggcaa gttagaatcc agcttaagga tcatatagat cgtaccagga agaagagagg 1080
cgagaaagat gaaactgagt atgagtacag tgggagtgag gaagaagagg aggaagtgcc 1140
tgaacaggaa ggagagccaa gttccattgt gaacgtgcct ggtgagtcta ctcttcgccg 1200
agatttcctg agactgcagc aggagaacaa ggaacgttcc gaggctcttc ggagacaaca 1260
gttactacag gagcaacagc tccgggagca ggaagaatat aaaaggcaac tgctggcaga 1320
gagacagaag cggattgagc agcagaaaga acagaggcga cggctagaag agcaacaaag 1380
gagagagcgg gaagctagaa ggcagcagga acgtgaacag cgaaggagag aacaagaaga 1440
aaagaggegt ctagaggagt tggagagaag gegeaaagaa gaagaggaga ggagaeggge 1500
agaagaagaa aagaggagag ttgaaagaga acaggagtat atcaggcgac agctagaaga 1560
ggagcagcgg cacttggaag tccttcagca gcagctgctc caggagcagg ccatgttact 1620
gcatgaccat aggaggccgc accegcagca ctegcagcag cegccaccac egcagcagga 1680
aaggagcaag ccaagcttcc atgetceega geecaaagee cactaegage etgetgaeeg 1740
agegegagag gtteetgtga gaacaacate tegeteeeet gttetgteee gtegagatte 1800
cccactgcag ggcagtgggc agcagaatag ccaggcagga cagagaaact ccaccagtat 1860
tgagcccagg cttctgtggg agagagtgga gaagctggtg cccagacctg gcagtggcag 1920
ctcctcaggg tccagcaact caggatccca gcccgggtct caccctgggt ctcagagtgg 1980
ctccggggaa cgcttcagag tgagatcatc atccaagtct gaaggctctc catctcagcg 2040
cctggaaaat gcagtgaaaa aacctgaaga taaaaaggaa gttttcagac ccctcaagcc 2100
tgctgatctg accgcactgg ccaaagaget tcgagcagtg gaagatgtac ggccacctca 2160
caaagtaacg gactactcct catccagtga ggagtcgggg acgacggatg aggaggacga 2220
cgatgtggag caggaagggg ctgacgagtc cacctcagga ccagaggaca ccagagcagc 2280
gtcatctctg aatttgagca atggtgaaac ggaatctgtg aaaaccatga ttgtccatga 2340
tgatgtagaa agtgagccgg ccatgacccc atccaaggag ggcactctaa tcgtccgcca 2400
gactcagtcc gctagtagca cactccagaa acacaaatct teeteeteet ttacacettt 2460
tatagacccc agattactac agatttctcc atctagcgga acaacagtga catctgtggt 2520
gggattttcc tgtgatggga tgagaccaga agccataagg caagatccta cccggaaagg 2580
ctcagtggtc aatgtgaatc ctaccaacac taggccacag agtgacaccc cggagattcg 2640
taaatacaag aagaggttta actctgagat tctgtgtgct gccttatggg gagtgaattt 2700
```

```
gctagtgggt acagagagtg gcctgatgct gctggacaga agtggccaag ggaaggtcta 2760
tectettate aaccqaaqae qattteaaca aatqqaeqta ettqaqqqet tqaatqtett 2820
ggtgacaata tetggcaaaa aggataagtt acgtgtetac tatttgteet ggttaagaaa 2880
taaaatactt cacaatgatc cagaagttga gaagaagcag ggatggacaa ccgtagggga 2940
tttggaagga tgtgtacatt ataaagttgt aaaatatgaa agaatcaaat ttctggtgat 3000
tgctttgaag agttctgtgg aagtctatgc gtgggcacca aagccatatc acaaatttat 3060
ggcctttaag tcatttggag aattggtaca tggatcctgt gctggattcc atgctgttga 3120
tgtggattca ggatcagtct atgacattta tctaccaaca catatccagt gtagcatcaa 3180
accecatgea atcateatee teeceaatae agatggaatg gagettetgg tgtgetatga 3240
agatgagggg gtttatgtaa acacatatgg aaggatcacc aaggatgtag ttctacagtg 3300
gggagagatg cctacatcag tagcatatat tcgatccaat cagacaatgg gctggggaga 3360
gaaggccata gagatccgat ctgtggaaac tggtcacttg gatggtgtgt tcatgcacaa 3420
aagggctcaa agactaaaat tettgtgtga acgcaatgac aaggtgttet ttgeetetgt 3480
teggtetggt ggeageagte aggtttattt catgacetta ggeaggaett etettetgag 3540
ctggtagaag cagtgtgatc cagggattac tggcctccag agtcttcaag atcctgagaa 3600
cttggaatte cttgtaactg gageteggag ctgcaecgag ggeaaccagg acagetgtgt 3660
gtgcagacct catgtgttgg gttctctccc ctccttcctg ttcctcttat ataccagttt 3720
ctgtta
<210> 47
<211> 1182
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 209854CB1
gttggtgaag tcaagcgaag gcgactagag ctccaggagg gccagttctg tgggctctag 60
teggecatat taataaagag aaagggaagg etgacegtee tteggeteeg eecceacata 120
cacaccett etteccaete egeteteaeg actaagetet caegattaag geaegeetge 180
ctcgattgtc cagcctctgc cagaagaaag cttagcagcc agcgcctcag tagagaccta 240
agggegetga atgagtggga aagggaaatg cegaceaatt gegetgegge gggetgtgee 300
actacctaca acaagcacat taacatcagc ttccacaggt ttcctttgga tcctaaaaga 360
agaaaagaat gggttegeet ggttaggege aaaaattttg tgeeaggaaa acacactttt 420
ctttgttcaa agcactttga agcctcctgt tttgacctaa caggacaaac tcgacgactt 480
aaaatggatg ctgttccaac catttttgat ttttgtaccc atataaagtc tatgaaactc 540
aagtcaagga atcttttgaa gaaaaacaac agttgttctc cagctggacc atctaattta 600
aaatcaaaca ttagtagtca gcaagtacta cttgaacaca gctatgcctt taggaatcct 660
atggaggcaa aaaagaggat cattaaactg gaaaaagaaa tagcaagctt aagaagaaaa 720
atgaaaactt gcctacaaaa ggaacgcaga gcaactcgaa gatggatcaa agccacgtgt 780
ttggtaaaga atttagaagc aaatagtgta ttacctaaag gtacatcaga acacatgtta 840
ccaactgcct taagcagtct tcctttggaa gattttaaga tccttgaaca agatcaacaa 900
gataaaacac tgctaagtct aaatctaaaa cagaccaaga gtaccttcat ttaaatttag 960
cttgcacaga gcttgatgcc tatccttcat tcttttcaga agtaaagata attatggcac 1020
ttatgccaaa attcattatt taataaagtt ttacttgaag taacattact gaatttgtga 1080
agacttgatt acaaaagaat aaaaaacttc atatggaaat tttatttgaa aatgagtgga 1140
agtgccttac attagaatta cggactttca aaactatgat aa
<210> 48
<211> 1676
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 1384286CB1
```

<400> 48

```
tegeogagee egteegeege egecatggee accaeggtga cetgeaceeg etteacegae 60
gagtaccage tetacgagga tattggcaag ggggetttet etgtggteeg aegetgtgte 120
aaqctctqca ccggccatga gtatgcagcc aagatcatca acaccaagaa gctgtcagcc 180
agagafcacc agaagetgga gagagaget eggatetgee geettetgaa geatteeaac 240
atogtgcgtc tccacgacag catctccgag gagggcttcc actacctggt cttcgatctg 300
gtcactggtg gggagctctt tgaagacatt gtggcgagag agtactacag cgaggctgat 360
gccagtcact gtatccagca gatcctggag gccgttctcc attgtcacca aatgggggtc 420
gtccacagag acctcaagcc ggagaacctg cttctggcca gcaagtgcaa aggggctgca 480
gtgaagetgg cagacttegg cetagetate gaggtgeagg gggaceagea ggeatggttt 540
ggtttcgctg gcacaccagg ctacctgtcc cctgaggtcc ttcgcaaaga ggcgtacggc 600
aageeegtgg acatetggge atgtggggtg ateetgtaca teetgetegt gggetaeeea 660
cccttctqqq acgaggacca gcacaagctg taccagcaga tcaaggctgg tgcctatgac 720
ttcccgtccc ctgagtggga caccgtcact cctgaagcca aaaacctcat caaccagatg 780
ctgaccatca accetgecaa gegeatcaca geceatgagg ceetgaagea eeegtgggte 840
tgccaacgct ccacggtagc atccatgatg cacagacagg agactgtgga gtgtctgaaa 900
aagttcaatg ccaggagaaa gctcaaggga gccatcctca ccaccatgct ggccacacgg 960
aatttctcag cagccaagag tttactcaac aagaaagcag atggagtcaa gccccatacg 1020
aatagcacca aaaacagtgc agccgccacc agccccaaag ggacgcttcc tcctgccgcc 1080
ctggagtctt ctgacagtgc caataccacc atagaggatg aagacgctaa agcccggaag 1140
caggagatca ttaagaccac ggagcagctc atcgaggccg tcaacaacgg tgactttgag 1200
gcctacgcga aaatctgtga cccagggctg acctcgtttg agcctgaagc actgggcaac 1260
ctggttgaag ggatggactt ccacagattc tacttcgaga acctgctggc caagaacagc 1320
aagccgatcc acacgaccat cctgaaccca cacgtgcacg tcattggaga ggatgccgcc 1380
tgcatcgctt acatccggct cacgcagtac attgacggc agggccggcc ccgcaccagc 1440
cagtetgagg agaceegegt gtggeaeege egegaeggea agtggeagaa egtgeaette 1500
cactgetegg gegegeetgt ggeeeegetg eagtgaagag etgegeeetg gtttegeegg 1560
acagagttgg tgtttggage eegactgeee tegggeacae ggeetgeetg tegcatgttt 1620
gtgtctgcct cgttccctcc cctggtgcct gtgtctgcag aaaaacaage ccgact
                                                                  1676
<210> 49
<211> 1597
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 1512656CB1
teggeetteg gaaagaeeee egggeegggg caeggagaga geegagegee geageegtga 6,0
gccgaataga gccggagaga cccgagtatg accggagaag cccaggccgg ccggaagagg 120
agecgagege ggeeggaagg aaccgageee gteegaaggg ageggaegea geetggeetg 180
gggeceggte gagecegege catggeggee gaggegaeag etgtggeegg aagegggget 240
gttggegget geetggeeaa agaeggettg eageagteta agtgeeegga eactaceeea 300
aaacggcggc gegectegtc getgtegegt gacgecgage geegagecta ceaatggtgc 360
egggagtaet tgggeggge etggegeega gtgeageeeg aggagetgag ggtttaeece 420
gtgagcggag gcctcagcaa cctgctcttc cgctgctcgc tcccggacca cctgcccagc 480
gttggcgagg agccccggga ggtgcttctg cggctgtacg gagccatctt gcagggcgtg 540
gactecetgg tgetagaaag egtgatgtte gecatacttg eggageggte getggggeee 600
cagetgtacg gagtetteec agagggeegg etggaacagt acateecaag teggeeattg 660
aaaactcaag agcttcgaga gccagtgttg tcagcagcca ttgccacgaa gatggcgcaa 720
tttcatggca tggagatgcc tttcaccaag gagccccact ggctgtttgg gaccatggag 780
cggtacctaa aacaqatcca ggacctgccc ccaactggcc tccctgagat gaacctgctg 840
gagatgtaca gcctgaagga tgagatgggc aacctcagga agttactaga gtctacccca 900
tegecagteg tettetgeca caatgacate caggaaggga acatettget geteteagag 960
ccagaaaatg ctgacagcct catgctggtg gacttcgagt acagcagtta taactatagg 1020
ggctttgaca ttgggaacca tttttgtgag tgggtttatg attatactca cgaggaatgg 1080
cetteetaca aageaaggee cacagactae eccaeteaag aacageagtt geattetatt 1140
```

<212> DNA

```
cgtcattacc tggcagaggc aaagaaaggt gagaccctct cccaagagga gcagagaaaa 1200
ctggaagaag atttgctggt agaagtcagt cggtatgctc tggcatccca tttcttctgg 1260
ggtetgtggt ccatecteca ggcatecatg tecaecatag aatttggtta ettggactat 1320
qcccagtete ggttecagtt ctacttecag cagaagggge agetgaecag tgtecaetee 1380
tcatcctgac tccaccctcc cactccttgg atttctcctg gagcctccag ggcaggacct 1440
tggagggagg aacaacgagc agaaggccct ggcgactggg ctgagccccc aagtgaaact 1500
gaggttcagg agaccggcct gttcctgagt ttgagtaggt ccccatggct ggcaggccag 1560
agccccgtgc tgtgtatgta acacaataaa caagctg
<210> 50
<211> 2145
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2098635CB1
cccacgcgtc cggacagctt gacccagttt gctttccaat caaagggcat ttattttgaa 60
tgtctctttg tggcgcaaga gccaacgcaa aaatgatggc ggcttacaat ggcggtacat 120
ctcacctgct tcaccaccac caccctcaac accatcttca tccggggtcg gctgccgctg 240
tacaccetgt acagcagcae acetettegg cagetgegge ageegcagea geggetgeag 300
etgeageeat gttaaaceet gggeaacaae ageeatattt cecateaceg geacegggge 360
aggeteetgg accagetgea geageeecag eteaggtaea ggetgeegea getgetaeag 420
ttaaggcgca ccatcatcag cactcgcatc atccacagca gcagctggat attgagccgg 480
atagacetat tggatatgga geetttggtg ttgtetggte agtaacagat ecaagagatg 540
gaaagagagt agegeteaaa aagatgeeea aegtetteea gaatetggte tettgeaaaa 600
gggtetteeg ggaattgaag atgttgtgtt tttttaagea tgataatgta etetetgeee 660
ttgacatact ccaacctcca cacattgact attttgaaga aatatatgtt gtcacagaat 720
tgatgcagag tgacctacat aaaattatcg tctctcctca accactcagc tcagatcatg 780
tcaaagtttt tctttatcag attttgcgag gtttgaaata tctccattca gctggcattt 840
tacatcgaga cattaagcca gggaatctcc ttgtgaacag caactgtgtt ctaaagattt 900
gtgattttgg attggccaga gtggaagagt tagatgaatc ccgtcatatg actcaggaag 960
ttgttactca gtattatcgg gctccagaaa tcctgatggg cagccgtcat tacagcaatg 1020
ctattgacat ctggtctgtg ggatgtatct ttgcagaact actaggacga agaatattgt 1080
ttcaggcaca gagtcccatt cagcagttgg atttgatcac ggatctgttg ggcacaccat 1140
cactggaagc aatgaggaca gcttgtgaag gcgctaaggc acatatactc aggggtcctc 1200
ataaacagcc atctetteet gtaetetata eeetgtetag eeaggetaca eatgaagetg 1260
ttcatctcct ttgcaggatg ttggtctttg atccatccaa aagaatatcc gctaaggatg 1320
ccttagccca cccctaccta gatgaagggc gactacgata tcacacatgt atgtgtaaat 1380
gttgetttte cacctecact ggaagagttt ataccagtga etttgageet gtcaccaate 1440
ccaaatttqa tgacactttc gagaagaacc tcagttctgt ccgacaggtt aaagaaatta 1500
ttcatcagtt cattttggaa cagcagaaag gaaacagagt gcctctctgc atcaaccctc 1560
agtetgetge ttttaagage tttattagtt ceaetgttge teagecatet gagatgeece 1620
catctcctct ggtgtgggag tgatggtgga agataatgta ctactgaaga tgtaatgtag 1680
ctttccactg gagtctggga tttgcaattc tggaggttaa tcatgcttgt actgtaattt 1740
tactaatgaa gttttaaatt aacaaccact acttgtatga tatgaataat atttagaaat 1800
gttactagac ttttaatctt gtaaagtggt tgtgctttta gaagaaaaat attttaccca 1860
gagttgcaca tgttttatga atttagtgca gctgttatgg ctcacctcag aacaaaagag 1920
tgagattgtt cacacacaca cacacacaca cacacacaca cacaaacaca aaggacagtc 2040
atacattttg atatttgage catteetaaa gatttggggt tttetaaaac taaagaatet 2100
aggaaccttg cctgcgacca atcatggagc cacgtgagct gatcg
                                                               2145
<210> 51
<211> 1454
```

```
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2446646CB1
gggttcgaat tgcaacggca gctgccgggc gtatgtgttg gtgctagagg cagctgcagg 60
gtctcgctgg gggccgctcg ggaccaattt tgaagaggta cttggccacg acttattttc 120
acctccgacc tttccttcca ggcggtgaqa ctctggactg agagtggctt tcacaatgga 180
agggatcagt aatttcaaga caccaagcaa attatcagaa aaaaagaaat ctgtattatg 240
ttcaactcca actataaata tcccggcctc tccgtttatg cagaagcttg gctttggtac 300
tggggtaaat gtgtacctaa tgaaaagatc tccaagaggt ttgtctcatt ctccttgggc 360
tgtaaaaaag attaatccta tatgtaatga tcattatcga agtgtgtatc aaaagagact 420
aatggatgaa gctaagattt tgaaaagcct tcatcatcca aacattgttg gttatcgtgc 480
ttttactgaa gccaatgatg gcagtctgtg tcttgctatg gaatatggag gtgaaaagtc 540
tctaaatgac ttaatagaag aacgatataa agccagccaa gatccttttc cagcagccat 600
actgetteat ggagacataa agtetteaaa tgttgtaatt aaaggegatt ttgaaacaat 720
taaaatctgt gatgtaggag tctctctacc actggatgaa aatatgactg tgactgaccc 780
tgaggettgt tacattggca cagagecatg gaaacecaaa gaagetgtgg aggagaatgg 840
tgttattact gacaaggcag acatatttgc ctttggcctt actttgtggg aaatgatgac 900
tttatcgatt ccacacatta atctttcaaa tgatgatgat gatgaagata aaacttttga 960
tgaaagtgat tttgatgatg aagcatacta tgcagcgttg ggaactaggc cacctattaa 1020
tatggaagaa ctggatgaat cataccagaa agtaattgaa ctcttctctg tatgcactaa 1080
tgaagaccct aaagatcgtc cttctgctgc acacattgtt gaagctctgg aaacagatgt 1140
ctagtgatca tctcagctga agtgtggctt gcgtaaataa ctgtttattc caaaatattt 1200
acatagttac tatcagtagt tattagactc taaaattggc atatttgagg accatagttt 1260
cttgttaaca tatggataac tatttctaat atgaaatatg cttatattgg ctataagcac 1320
ttggaattgt actgggtttt ctgtaaagtt ttagaaacta gctacataag tactttgata 1380
ctgctcatgc tgacttaaaa cactagcagt aaaacgctgt aaactgtaac attaaattga 1440
                                                                 1454
atgaccatta cttt
<210> 52
<211> 3225
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2764911CB1
<400> 52
tggagcaggg ggcggtttgg ttgcgcggta ctagcggtgc ccgccgaatg gggaggaggc 60
gaggagegag eegtgeggee agagegggaa agagaetegt etttgegtee gagttetgga 120
geegeegeae eeegaeteet ggggeegegg eageggetge gaggggaegg gegteegetg 180
teteetgggt teeeetegta gegaceegeg ggateggaaa aaaaggagaa gatggaggag 240
gagggtggca gcagcggcgg cgccgcgggg accagcgcgg acggcggcga cggaggagag 300
cageteetea etgteaagea egagetgegg aetgetaatt tgacaggaca tgetgagaag 360
gtgggaatag aaaattttga gctcctgaag gtcctaggaa ctggagctta tggaaaagta 420
tttctagttc gtaaaataag tggccatgat actggaaagc tgtatgccat gaaagttttg 480
aaaaaggcaa caatcgttca aaaggccaaa accacagagc atacaaggac agaacgacaa 540
gtcctggaac acattaggca gtcgccattt ttggtaacat tacattatgc tttccagaca 600
gaaaccaaac ttcatctcat tttagattat ataaatggtg gtgaactttt tacccatctt 660
teteaaagag agegttteae agageatgag gtgeagattt atgttggaga gattgtgett 720
gecetegaae atetecaeaa gttggggatt atatategtg atattaaget tgagaatatt 780
ctacttgatt ctaatggcca tgtggtgctg acagattttg gtctgagtaa ggagtttgtg 840
gctgatgaaa ctgaaagagc atattccttt tgtggaacta ttgaatacat ggcaccagat 900
attgtcagag ggggagattc aggacatgac aaggcagttg actggtggag tttgggtgtt 960
```

```
ctaatgtatg aattactaac tggagcatct cctttcactg ttgatggaga aaaaaattcc 1020
caagetqaqa tatetaqqaq aatattaaaa aqtqaqeete catateeeca agaaatgagt 1080
gctttagcga aagacctaat tcagcgtctt ttgatgaaag atcccaagaa gagattggga 1140
tgtggtccac gtgatgcaga tgaaatcaaa gaacatctct tctttcagaa aataaattgg 1200
gatgatttag ccgccaaaaa agtgcctgca ccatttaagc cagtcattcg agatgaatta 1260
gatgtgagta actttgcaga agagttcaca gaaatggatc ccacttattc tcccgcagcc 1320
ctgccccaga gttctgagaa gctgtttcag ggctattcct ttgttgctcc ttccatccta 1380
ttcaaqcgta atqcaqctgt catagaccct cttcaqtttc acatgggagt tgaacgtcct 1440
ggagtgacaa atgttgccag gagtgcaatg atgaaggact ctccattcta tcaacactat 1500
gacctagatt tgaaggacaa acccctggga gaaggtagtt tttcaatttg tcgaaagtgt 1560
gtgcataaaa aaagtaacca agcttttgca gtcaaaataa tcagcaaaag gatggaagcc 1620
aatactcaaa aggaaataac agctctggaa ctctgtgaag gacaccccaa tattgtgaag 1680
ttgcatgaag tttttcatga tcagettcac acgtttctag tgatggaact tctgaatgga 1740
ggagaactgt ttgagcgcat taagaaaaag aagcacttca gtgagacgga agccagctac 1800
atcatgagga agcttgtttc agctgtaagc cacatgcatg atgttggagt ggtgcacagg 1860
gatctgaaac ctgagaattt attgttcacc gatgaaaatg acaatttgga aattaaaata 1920
attgattttg gatttgcacg gctaaagcca ccggataatc agcccctgaa gactccatgc 1980
ttcaccette attatgeege eccagagete ttgaatcaga acggetacga tgagteetgt 2040
gacctgtgga gcttgggcgt cattttgtac acaatgttgt caggacaggt tcccttccaa 2100
tctcatgacc gaagtttgac gtgtaccagc gcggtggaaa tcatgaagaa aattaaaaag 2160
ggagatttct cctttgaagg agaagcctgg aagaatgtat cccaagaggc taaagatttg 2220
atccaaggac ttctcacagt agatccaaac aaaaggctta aaatgtctgg cttgaggtac 2280
aatgaatggc tacaagatgg aagtcagctg tcctccaatc ctctgatgac tccggatatt 2340
ctaggatett eeggagetge egtgeataee tgtgtgaaag caacetteea egeetttaae 2400
aaatacaaga gagagggtt ttgccttcag aatgttgata aggccccttt ggctaagaga 2460
agaaaaatga aaaagactag caccagtacc gagacacgca gcagttccag tgagagttcc 2520
cattettett ceteteatte teaeggtaaa aetacaeeca ecaagaeact geageecage 2580 -
aatcetgeeg acageaataa ceeggagace etetteeagt teteggacte agtagettag 2640 .
gcatggtagg agtgtatcag tgatccattg cacctttatt ccctcagcat atgcctgagg 2700
cgatctttta tgcttttaaa aatgtttccc gttggtctca ttggaatctg cctcctaatg 2760
atttttttca ggaaaacctg tttggttatc ctcattcaaa agcactggac agagaatgtt 2820
actgtgaata gagcacatat tactcttttt agcaacctag catgatgcca acaagactat 2880
tettgaaaga geaaaggtte etgtaaattt aattaggget agatttgage tgettgtaag 2940
tcacaggttt tccagatgtc tgccaacaag aaatgactca tactgtgatg ataccttttg 3000
ctttgccttg tggacaatgt gggtttttga aatttgcacc cttcaaacaa tgatttatca 3060
gagaaagggg tetgttttea aaaaagatte tgtaatgaat tttatgtgtg geatataett 3120
atttettgag agaagatttt aacttattgt ttttatttta tggttacata tgatgataac 3180
<210> 53
<211> 2110
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 3013946CB1
<400> 53
tegeegagee egteegeege egeeatggee accaeggtga cetgeaceeg etteacegae 60
gagtaccage tetacgagga tattggcaag ggggetttet etgtggteeg acgetgtgte 120
aagetetgea eeggeeatga gtatgeagee aagateatea acaceaagaa getgteagee 180
agagatcacc agaagctgga gagagaggct cggatctgcc gccttctgaa gcattccaac 240
ategtgegte tecaegacag cateteegag gagggettee actaeetggt ettegatetg 300
gtcactggtg gggagctctt tgaagacatt gtggcgagag agtactacag cgaggctgat 360
gccagtcact gtatccagca gatcctggag gccgttctcc attgtcacca aatgggggtc 420
gtccacagag acctcaagcc ggagaacctg cttctggcca gcaagtgcaa aggggctgca 480
gtgaagetgg cagacttegg cetagetate gaggtgeagg gggaceagea ggcatggttt 540
ggttttcgctg gcacaccagg ctacctgtcc cctgaggtcc ttcgcaaaga ggcgtatggc 600
```

```
aagcctgtgg acatctgggc atgtggggtg atcctgtaca tcctgctcgt gggctaccca 660
cccttctggg acgaggacca gcacaagctg taccagcaga tcaaggctgg tgcctatgac 720
ttcccgtccc ctgagtggga caccgtcact cctgaagcca aaaacctcat caaccagatg 780
ctgaccatca accetgecaa gegeateaca geecatgagg eeetgaagea eeegtgggte 840
tgccaacgct ccacggtagc atccatgatg cacagacagg agactgtgga gtgtctgaaa 900
aagttcaatg ccaggagaaa gctcaaggga gccatcctca ccaccatgct ggccacacgg 960
aattteteag ccaagagttt acteaacaag aaagcagatg gagteaagee ccagacgaat 1020
agcaccaaaa acagtgcagc cgccaccagc cccaaaggga cgcttcctcc tgccgccctg 1080
gageeteaaa eeacegteat eeataaceea gtggaeggga ttaaggagte ttetgaeagt 1140
gccaatacca ccatagagga tgaagacgct aaagccccca gggtccccga catcctgagc 1200
geteeetttg geeeetgee ageteeatee eecaggatet etgacateet gaactetgtg 1320
agaaggggtt caggaacccc agaagccgag gggcccctct cagcggggcc cccgccctgc 1380
etgteteegg eteteetagg ecceetgtee teecegteee ecaggatete tgacateetg 1440
aactetgtga ggaggggete agggaceeca gaageeaagg geeeetegee agtggggeee 1500
cegecetgee cateteegae tateeetgge eecetgeeca eeceateeeg gaageaggag 1560
atcattaaga ccacggagca gctcatcgag gccgtcaaca acggtgactt tgaggcctac 1620
gegaaaatet gtgaceeagg getgaceteg tttgageetg aageaetggg caacetggtt 1680
gaagggatgg acttccacag attctacttc gagaacctgc tggccaagaa cagcaagcca 1740
atccacacga ccatcctgaa cccacacgtg cacgtcattg gagaggatgc cgcctgcatc 1800
gettacatee ggeteacgea gtacattgae gggeagggee ggeeeegeae eageeagtet 1860
gaggagaccc gcgtgtggca ccgccgcgac ggcaagtggc agaatgtgca cttccactgc 1920
tegggegege etgtggeece getgeagtga agagetgege eetggttteg eeggaeagag 1980
ttggtgtttg gagcccgact gccctcgggc acacggcctg cctgtcgcat gtttgtgtct 2040
gcctcgttcc ctcccctggt gcctgtgtct gcagaaaaac aagaccagat gtgatttgtt 2100
aaaaaaaaa
                                                                 2110
<210> 54
<211> 2140
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 067967CB1
<400> 54
gtgcgctgag ctgcagtgtc tggtcgagag tacccgtggg agcgtcgcgc cgcggaggca 60
geegteeegg egtaggtgge gtggeegaee ggaeeeeeaa etggegeete teeeegegeg 120
gggtcccgag ctaggagatg ggaggcacag ctcgtgggcc tgggcggaag gatgcggggc 180
cgcctggggc cgggctcccg ccccagcagc ggaggttggg ggatggtgtc tatgacacct 240
tcatgatgat agatgaaacc aaatgtcccc cctgttcaaa tgtactctgc aatccttctg 300
aaccacette acceagaaga etaaatatga eeactgagea gtttacagga gateataete 360
agcacttttt qqatqqaqqt qaqatqaaqq taqaacaqct qtttcaaqaa tttqqcaaca 420
gaaaatccaa tactattcag tcagatggca tcagtgactc tgaaaaatgc tctcctactg 480
tttctcaggg taaaagttca gattgcttga atacagtaaa atccaacagt tcatccaagg 540
cacccaaagt ggtgcctctg actccagaac aagccctgaa gcaatataaa caccacctca 600
ctgcctatga gaaactggaa ataattaatt atccagaaat ttactttgta ggtccaaatg 660
ccaagaaaag acatggagtt attggtggtc ccaataatgg agggtatgat gatgcagatg 720
gggcctatat tcatgtacct cgagaccatc tagcttatcg atatgaggtg ctgaaaatta 780
ttggcaaggg gagttttggg caggtggcca gggtctatga tcacaaactt cgacagtacg 840
tggccctaaa aatggtgcgc aatgagaagc gctttcatcg tcaagcagct gaggagatcc 900
ggattttgga gcatcttaag aaacaggata aaactggtag tatgaacgtt atccacatgc 960
tggaaagttt cacattccgg aaccatgttt gcatggcctt tgaattgctg agcatagacc 1020
tttatgaget gattaaaaaa aataagttte agggttttag egteeagttg gtacgeaagt 1080
ttgcccagtc catcttgcaa tctttggatg ccctccacaa aaataagatt attcactgcg 1140
atctgaagee agaaaacatt eteetgaaae accaegggeg eagtteaace aaggteattg 1200
actttgggte eagetgttte gagtaceaga agetetaeae atatateeag teteggttet 1260
acagagetee agaaateate ttaggaagee getacageae accaattgae atatggagtt 1320
```

```
ttggctgcat ccttgcagaa cttttaacag gacagcctct cttccctgga gaggatgaag 1380
gagaccagtt ggcctgcatg atggagette tagggatgcc accaccaaaa ettetggage 1440
aatccaaacg tgccaagtac tttattaatt ccaagggcat accccgctac tgctctgtga 1500
ctacccagge agatgggagg gttgtgcttg tggggggtcg ctcacgtagg ggtaaaaagc 1560
ggggtccccc aggcagcaaa gactggggga cagcactgaa agggtgtgat gactacttgt 1620
ttatagagtt cttgaaaagg tgtcttcact gggacccctc tgcccgcttg accccagctc 1680
aagcattaag acaccettgg attagcaagt etgteeceag aceteteace accatagaca 1740
aggtgtcagg gaaacgggta gttaatcctg caagtgcttt ccagggattg ggttccaagc 1800
tgcctccagt tgttggaata gccaataagc ttaaagctaa cttaatgtca gaaaccaatg 1860
gtagtatacc cctatgcagt gtattgccaa aactgattag ctagtggaca gagatatgcc 1920
cagagatgca tatgtgtata tttttatgat cttacaaacc tgcaaatgga aaaaatgcaa 1980
gcccattggt ggatgttttt gttagagtag acttttttta aacaagacaa aacattttta 2040
tatgattata aaagaattct tcaagggcta attacctaac cagcttgtat tggccatctg 2100
2140
<210> 55
<211> 1728
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 346275CB1
<400> 55
gacagacaaa gcgccgccac gcgtccgcat gtcggatgtt tgtagcagtc agagagcaga 60
acatgagcat etgecaggte tggtteecee accateaggg atgggagtga gaaaggggag 120
ttcccctctg aagagccacc cctgcaggga gaaatctgtc tccaacagga gatctgggaa 180
gaccatagtg agaagtgctg tcgaagaggt ccgcacagcg ggccttttcc gaagtggttt 240
tagcgaagag aaggcaactg gcaagctctt tgctgtgaag tgtatcccta agaaggcgct 300
gaagggcaag gaaagcagca tagagaatga gatagccgtc ctgagaaaga ttaagcatga 360
aaatattgtt gccctggaag acatttatga aagcccaaat cacctgtact tggtcatgca 420
gctggtgtcc ggtggagagc tgtttgaccg gatagtggag aaggggtttt atacagagaa 480
ggatgccage actetgatee gecaagtett ggacgeegtg tactatetee acagaatggg 540
catcgtccac agagacctca agcccgaaaa tctcttgtac tacagtcaag atgaggagtc 600
caaaataatg atcagtgact ttggattgtc aaaaatggag ggcaaaggag atgtgatgtc 660
cactgcctgt ggaactccag gctatgtcgc tcctgaagtc ctcgcccaga aaccttacag 720
caaagccgtt gactgctggt ccatcggagt gattgcctac atcttgctct gcggctaccc 780
tcctttttat gatgaaaatg actccaagct ctttgagcag atcctcaagg cggaatatga 840
gtttgactct ccctactggg atgacatctc cgactctgca aaagacttca ttcggaacct 900
gatggagaag gacccgaata aaagatacac gtgtgagcag gcagctcggc acccatggat 960
cgctggtgac acagccctca acaaaaacat ccacgagtcc gtcagcgccc agatccggaa 1020
aaactttgcc aagagcaaat ggagacaagc atttaatgcc acggccgtcg tgagacatat 1080
gagaaaacta cacctcggca gcagcctgga cagttcaaat gcaagtgttt cgagcagcct 1140
cagtttggcc agccaaaaag actgtgcgta tgtagcaaaa ccagaatccc tcagctgaca 1200
ctgaagacga gcctggggtg gagaggaggg agccggcatc tgccgagcac ctcctgtttg 1260
ccaggegett tetataetta ateccatgte atgegaeeet aggaettttt ttaacatgta 1320
ateactgggc egggtgcagt ggctcacgcc tgtaatccca acactttggg aggctgaggc 1380
aggaggactg tttgagttca ggagttttaa gaccagcctg accaacatgg tgaaacccca 1440
tetetaetaa aatataaaaa ttageegggt gtggtggega geaeetgtaa tgteagetae 1500
ttgggaggct gaggcaggag aatcacttga acccaggaag cggaggttgc aatgagctga 1560
gatcacacca ctgcactcca gcctgggtga cagattgaga ctccctctca aaaaaaaaag 1620
ggaaatcatt gaacactcgt ggaaccctag gtattgcata ttccatttac ggtttgggaa 1680
tecagggete aagteetege aggggtaceg agetegagat egtaatea
<210> 56
<211> 1610
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<223> Incyte ID No: 283746CB1
<400> 56
gtcgcctctg aaggagaacc attttccatc tctttcatag ttttttcccc cagtcagcgt 60
ggtagcggta ttctccgcgg cagtgacagt aattgttttt gcctctttag ccaagacttc 120
egecetegat caagatggtg gttggaegge etteetaace tttaegggge etggeggtge 180
tgacgcctga gctggtaggg gtggagcagg taggaaacag caaatgcaga agctgctgcg 240
eggaagtegg ceatggactg gaaagaagtt ettegtegge geetagegae geecaacace 300
tgtccaaaca ctgcctgctg aagatgaagt cttactacag aaattaagag aggaatcaag 360
agctgtcttt ctacaaagaa aaagcagaga actgttagat aatgaagaat tacagaactt 420
atggtttttg ctggacaaac accagacacc acctatgatt ggagaggaag cgatgatcaa 480
ttacgaaaac tttttgaagg ttggtgaaaa ggctggagca aagtgcaagc aatttttcac 540
agcaaaagtc tttgctaaac tccttcatac agattcatat ggaagaattt ccatcatgca 600
gttctttaat tatgtcatga gaaaagtttg gcttcatcaa acaagaatag gactcagttt 660
atatgatgtc gctgggcagg ggtaccttcg ggaatctgat ttagaaaact acatattgga 720
acttatecet aegttgeeae aattagatgg tetggaaaaa tetttetaet eettttatgt 780 ttgtacagea gttaggaagt tettettett tttagateet ttaagaacag gaaagataaa 840
aattcaagat attttagcat gcagcttcct agatgattta ttggagctaa gggatgagga 900
actgtccaag gagagtcaag aaacaaattg gttttctgct ccttctgccc taagagttta 960
tggccagtac ttgaatcttg ataaagatca caatggcatg ctcagtaaag aagaactctc 1020
acgctatgga acagctacca tgaccaatgt cttcttagac cgtgttttcc aggagtgtct 1080
cacttatgat ggagaaatgg actataagac ctacttggac tttgtccttg cattagaaaa 1140
cagaaaggaa cctgcagctc tacaatatat tttcaaactg cttgatattg agaacaaagg 1200
atacctgaat gtcttttcac ttaattattt ctttagggcc atacaggaac taatgaaaat 1260
ccatggacaa gatcctgttt catttcaaga tgtcaaggat gaaatctttg acatggtaaa 1320
accaaaggat cctttgaaaa tctctcttca ggatttaatc aacagtaatc aaggagacac 1380
agtaaccacc attctaatcg atttgaatgg cttctggact tacgagaaca gagaggctct 1440
tgttgcaaat gacagtgaaa actctgcaga ccttgatgat acatgatctc tgaaagacta 1500
gactgtctta tattatgaga tacttgaatg ctgcatgtaa agcctttaaa gcaaaatcct 1560
1610
<210> 57
<211> 1290
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2696537CB1
<400> 57
ceggeteeeg cegggaagtt ctaggeegee geacagaaag ceetgeeete caegeegggt 60
ctetggageg ccetgggttg cceggeeggt ccetqeeget gaettgttga caetqeqage 120
actcagtece tecegegege etecteeeg eeggeeegge egeteeteet eeetgtaaca 180
tgccatagtg cgcctgcgac cacacggccg gggcgctagc gttcgccttc agccaccatg 240
gggaatggga tgaacaagat cctgcccggc ctgtacatcg gcaacttcaa agatgccaga 300
gacgcggaac aattgagcaa gaacaaggtg acacatattc tgtctgtcca tgatagtgcc 360
aggectatgt tggagggagt taaatacctg tgcatcccag cageggattc accatctcaa 420
aacctgacaa gacatttcaa agaaagtatt aaattcattc acgagtgccg gctccgcggt 480
gagagetgee ttgtacaetg cetggeeggg gteteeagga gegtgacaet ggtgategea 540
tacatcatga ccgtcactga ctttggctgg gaggatgccc tgcacaccgt gcgtgctggg 600
agatectgtg ccaaceccaa egtgggette cagagacage tecaggagtt tgagaageat 660
gaggtccatc agtatcggca gtggctgaag gaagaatatg gagagagccc tttgcaggat 720
gcagaagaag ccaaaaacat tctggccgct ccgggaattc tgaagttctg ggcctttctc 780
agaagactgt aatgtacctg aagtttctga aatattgcaa acccacagag tttaggctgg 840
tgctgccaaa aagaaaagca acatagagtt taagtatcca gtagtgattt gtaaacttgt 900
ttttcatttg aagctgaata tatacgtagt catgtttatg ttgagaacta aggatattct 960
```

```
ttagcaagag aaaatatttt ccccttatcc ccactgetgt ggaggtttct gtacctcgct 1020
tggatgcctq taaggatccc gggagccttg ccgcactgcc ttgtgggtgg cttggcgctc 1080
gtgattgctt cctgtgaacg cctcccaagg acgagcccag tgtagttgtg tggcgtgaac 1140
tetgeeegtg tgtteteaaa tteeceaget tgggaaatag ceettggtgt gggttttate 1200
totggtttgt gttctccgtg gtggaattga ccgaaagctc tatgttttcg ttaataaagg 1260
gcaacttagc caagtttaaa aaaaaaaaa
<210> 58
<211> 632
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 619292CB1
eggacgegtg gggteeagee geageteeag caeegaggae ttetgetaeg tetteaeggt 60
ggagetggaa egaggeeeet eegggetggg gatgggeetg ategaeggga tgeacaegea 120
cetgggegee eeegggetet acateeagae eetgeteeeg ggeageeeeg eageggeega 180
egggegeetg tegetggggg accgtatect ggaggtgaat ggeageagee teetgggeet 240
tggctacctg agagctgtgg acctgatccg tcatggcggg aagaagatgc ggttcctggt 300
egegaagtee gaegttggga aacagecaag aagatecatt teegeaegee eeetetetag 360
gggggctgcg aggacacccc cacaggcccg gcacccggtc ccacctggtg acactgggct 420
tecteeegee ttegteeetg ttttgtaact gaccaagttg ggteeegggt ggggageete 480
accetgggga catgeetgtt gataacatge ateteagtgt aggttetatt tatatggeag 540
atgacgtgaa attgtgatgt ttgttacaga gcttttatgt ttaaagactt caatggagaa 600
gtacggttca ataaactatt tttcccgttc tt
<210> 59
<211> 2347
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2054049CB1
<400> 59
cccagtttta tcatggattc atcctgaaag tcaagccaca atcactcggt gtagccagcc 60
catggttgga gtgagtggaa agcgaagcaa agaagatgaa aaataccttc aagctatcat 120
ggattccaat gcccagtctc acaaaatctt tatatttgat gcccggccaa gtgttaatgc 180
tgttgccaac aaggcaaagg gtggaggtta tgaaagtgaa gatgcctatc aaaatgctga 240
actagttttc ctggatatcc acaatattca tgttatgaga gaatcattac gaaaacttaa 300
ggagattgtg taccccaaca ttgaggaaac ccactggttg tctaacttgg aatctactca 360
ttggctagaa catattaagc ttattcttgc aggggctctt aggattgctg acaaggtaga 420
cactteeett geeatgetea tgttggatgg atactatega accateegag gatttgaagt 540
ccttgtggag aaagaatggc taagttttgg acatcgattt caactaagag ttggccatgg 600
agataagaac catgcagatg cagacagatc gcctgttttt cttcaattta ttgactgtgt 660
ctggcagatg acaagacagt ttcctaccgc atttgaattc aatgagtatt ttctcattac 720
cattttggac cacctataca gctgcttatt cggaacattc ctctgtaata gtgaacaaca 780
gagaggaaaa gagaatette etaaaaggae tgtgteactg tggtettaca taaacageea 840
gctggaagac ttcactaatc ctctctatgg gagctattcc aatcatgtcc tttatccagt 900
agccagcatg cgccacctag agctctgggt gggatattac ataaggtgga atccacggat 960
gaaaccacag gaacctattc acaacagata caaagaactt cttgctaaac gagcagagct 1020
tcagaaaaaa gtagaggaac tacagagaga gatttctaac cgatcaacct catcctcaga 1080
gagagecage teteetgeae agtgtgteae teetgteeaa aetgttgtat aaaggaetgt 1140
aagatcaggg gcatcattgc tatacactct tgattacact ggcagctcta tgagtagaaa 1200
```

```
qtcttcggaa tttaqaaccc atctatgaga gaaagttcag tcactttatt tattttaaat 1260
ctctctagga tgagtttaga actgtagcag tgcaggtggc ttaagtgaag taactccata 1320
tqtaattaca tgattatqat actaatettt taagtateca aagaatatta aaataettea 1380
atcctggatt cacagtggga acaagtttct attaaaaggc aaatgctgtt acaaattttt 1440
ggcatctggt aatattaaaa ccattttaga aatacactct gtgctcactg tgcagaggaa 1500
catcagtttt caaaccaaca ctgaaattct gtggcatcac atatattggg ccttgatgtc 1560
atgacagate aaaateattt gatateeett teteeattet aggtttttet ttttteagt 1620
aactgattta ccttgatcac ttttcaactt ccatattctt catatagtaa aaggcaaagt 1680
gttgaagata ctacggtgtg gtagtagttg aaaattattg ccgtcattat ttacatactt 1740
aagacatatt agcaagttga tccaaaatgg gaggccttat agatgtgctt gggggaaaat 1800
gaaggggaga aagtagccat acaggagttc aaagaattcc atgcccttca gattagccca 1860
attaccagaa acatcatgaa agatatttta aaaactaatt atttactaca gtgtatttca 1920
cttgtcttgt gtgtctgaac acacagaagc taattagcaa gtttttaaga agtatttaaa 1980
aatettaeta qqattqaeat tttttetgaa ttetgtataa atagettata gtgagaagta 2040
ctgtgctcaa attttacatt tttttccttt gcaaattctg taatttcact caacgattaa 2100
gtctaccaaa gaacacactg catgtaaaag atgtattaca atctcaaagc cagtaaaaga 2160
aatottgott cactgttcac ctgctacaag taagagtttg gtgctggtag aaacatttga 2220
ctctgatgtc tattttattc tacataagag ccatatgtaa tgtactgtaa caaaggagct 2280
tcttgtcccc ttggtctttt aattaaaaga aattccaact gacttttaaa ctttaaaaaa 2340
aaaaaaa
                                                                  2347
<210> 60
<211> 1737
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2843910CB1
<400> 60
ceggggetga gegetegget geageggege ggaggeegte teeetggtet geegeggtee 60
ecgeeegtee egeegeegge tgeeatggea ggageeggag ggtteggetg eeeegeggge 120
ggcaacgact tecagtggtg ettetegcag gteaaggggg ceategacga ggacgtggee 180
gaageggaca teattteeae egttgagttt aattaetetg gagatettet tgeaacagga 240
gacaagggcg gcagagttgt tatttttcag cgtgaacaag agaataaaag ccgccctcat 300
tctaggggag aatataatgt ttacagcacc tttcaaagtc atgaaccgga gtttgactat 360
ttgaaaagtc tagaaattga ggaaaaaatt aataaaatta ggtggttacc acaacagaat 420
qctqctcatt ttctactqtc tacaaatqat aaaactataa aattatggaa aataagtgaa 480
cgggataaaa gagcagaagg ttataacctg aaagacgaag atggaagact tcgagaccca 540
tttaggatca cggcgctacg ggtcccaata ttgaagccca tggatcttat ggtagaagcg 600
agtccacggc gaatttttgc aaatgctcac acatatcata taaattccat ttcagtaaat 660
agtgatcatg aaacatatct ttctgcagat gacctgagaa ttaatttatg gcacttagaa 720
atcacagata gaagctttaa catcgtggac atcaagcctg ctaacatgga ggagctgacc 780
qaagtcatca ctgcagccga gttccacccg caccagtgca acgtgttcgt ctacagcagt 840
agcaaaggga ccatccgcct gtgtgacatg cgctcctcgg ccctgtgcga cagacactcc 900
aagttttttg aagageetga agateeeage agtaggteet tetteteaga aataatttea 960
tccatatccg atgtaaaatt cagtcatagt gggcggtaca tgatgaccag agactacctg 1020
teggtgaagg tgtgggaeet caacatggag ageaggeegg tggagaeeea ceaggteeae 1080
gagtacctgc gcagcaaget ctgctctctc tatgagaacg actgcatett tgacaagttt 1140
gagtgttgct ggaacggttc ggatagcgcc atcatgaccg ggtcctataa caacttcttc 1200
aggatgtttg atagagacac geggagggat gtgaceetgg aggeetegag agagageage 1260
aaaccgcgcg ccagcctcaa accccggaag gtgtgtacgg ggggtaagcg gaggaaagac 1320
gagatcagtg tggacagtct ggacttcaac aagaagatcc tgcacacagc ctggcacccc 1380
gtggacaatg tcattgccgt ggctgccacc aataacttgt acatattcca ggacaaaatc 1440
aactagagac gcgaacgtga ggaccaagtc ttgtcttgca tagttaagcc ggacattttt 1500
ctgtcagaga aaaggcatca ttgtccgctc cattaagaac agtgacgcac ctgctacttc 1560
ccttcacaga cacaggagaa agccgcctcc gctggaggcc cggtgtggtt ccgcctcggc 1620
gaggegegag acaggegetg etgeteaegt ggagaegete tegaageaga gttgaeggae 1680
```

actgctccca aaaggtcatt actcagaata aatgtattta tttcaaaaaa aaaaaaa 1737